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VOLUME XI

January-December, 1970

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Volume XI
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CONTENTS

ORIGINAL PAPERS

- Practical Uses of Steroids
and Gonadotropins
in Obstetrics 1 VEASY C. B. BUTTRAM,
JR., M.D., PAIGE K.
BESCH, Ph.D., and
L. RUSSELL MALINAK,
M.D.
- Acute Illness Among
Returnees From Vietnam 8 ROBERT E. BLOUNT, M.D.
- Modern Concepts in
Treatment of Respiratory
Insufficiency 13 G. B. SHAW, M.D.

SPECIAL ARTICLE

- Radiologic Seminar XCI:
Tracheoesophageal Fistula 18 WALTER T. COLBERT,
M.D.

EDITORIALS

- Medicaid in Mississippi:
A Bare Bones Beginning 23 Million Dollar Shoestring
- The Old Chit-Chat Gets
a Facelifting 25 Newsletter's New Look
- Mandatory Licensure for
Mississippi Nurses 25 Policy Decision
- Jackson Chamber Honors
Health Care Team 26 Service Recognition
- Our Environment Is at Stake 27 Pollution Dilemma

THIS MONTH

- The President Speaking 22 Needed Now
- Medical Organization 37 USM Student Health
Service Offers
Comprehensive Campus
Care Program

Convalescing . . . but still a long way to go. Anxiety can make it even longer.

Convalescence following medical or surgical procedures may be almost endless to an anxious patient. And, indeed, anxiety with some patients actually retards progress—for example, by inducing insomnia and reducing cooperation.

As physicians have found during nearly 15 years of widespread use, Equanil may be a beneficial part of aftercare. It helps relieve anxiety and tension, thus often aiding your primary therapy.

Indications: For use in management of anxiety and tension occurring alone or as accompanying symptom complex to medical and surgical disorders and procedures. Though not a hypnotic, fosters normal sleep through antianxiety and related muscle-relaxant properties.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions,

observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

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NEWSLETTER

January 1970

Doctor:

Mississippi Hospital and Medical Service (Blue Cross-Blue Shield) has been named fiscal administrator for Medicaid. Commission made announcement in pre-Christmas news conference, and estimates are that program will cost 6 per cent of \$33.4 million budget or about \$2 million per year to administer.

Selection of fiscal administrator was narrowed when insurance companies pulled out of bidding. The Blue plan was the only bidder for the gargantuan task of program administration, paying physicians, hospitals, nursing homes, and health agencies.

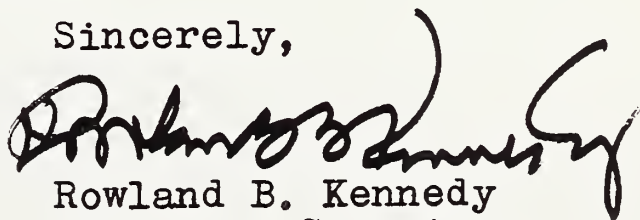
President Nixon conducted closed-door conference with AMA leadership delegation made up of President Dorman and group of Trustees. Three subjects were discussed: Medical manpower shortages, care costs, and services to the poor. AMA has initiated positive programs to get manpower up, costs held, and care delivery to poor.

Most recommendations from the McNerney Medicaid Task Force will rely heavily upon delivery system and alter federal pay policy. McNerney wants 5 per cent of Medicare budget or \$130 million to move toward paying for medical services on a fee-for-time basis rather than for group practice payments. Plan, however, does not exclude fee-for-service under traditional delivery patterns - yet.

Diversity Medical Center growth may be impaired if construction funds are not provided within next year. Facilities are squeezed with record enrollment of 778 students in all programs. Class of '73 has 90 beginning medical students, and degree nurse enrollment is 142. Various allied programs account for remainder, and each student is pursuing combination M.D.-Ph.D. degree.

LA headquarters office has a new telephone number made necessary by building expansion. Make a note of 354-4533 with Area Code 601. Building addition is virtually complete and scheduled for occupancy next two weeks. Watch for announcement of February open house.

Sincerely,



Rowland B. Kennedy
Executive Secretary

Surgeons Plan Meet in St. Paul

The American College of Surgeons will hold the second of three 1970 Sectional Meetings in St. Paul, Minn., Feb. 16-18. Some 550 surgeons are expected to attend this intensive three-day program, open to all doctors of medicine. This is the first ACS meeting in St. Paul since 1957. Headquarters hotel is the St. Paul Hilton.

Dr. Frederick M. Owens, Jr., clinical associate professor of surgery, University of Minnesota Medical School, and his local advisory committee on arrangements, have selected a distinguished faculty to present "How-I-Do-It" clinics, panel discussions, scientific papers, symposia, and medical films in general surgery and the specialties of otorhinolaryngology, thoracic surgery and urology.

Subjects to be covered include vascular surgery, rhinoplasty and septoplasty, mediastinoscopy, perforation of the esophagus, cardiac injuries, emergency treatment of head injuries in Viet Nam, arterial surgery for renal disease, prostatic carcinoma, Wilms' tumor, carcinoma of the breast and transportation of the injured patient.

Assisting Chairman Owens are these Minnesota Fellows of the College: general surgeons Lyle J. Hay; Armond J. Kremen; John F. Perry, Jr.; Edward W. Humphrey; Lyle A. Tongen; F. Henry Ellis, Jr.; Claude R. Hitchcock. Specialty representatives are Joseph H. Pratt, gynecology-obstetrics; Hendrik J. Svien, neurosurgery; Malcolm A. McCannel, ophthalmology; Jerome A. Hilger, otorhinolaryngology; Donald R. Lannin, orthopedics; John B. Erich, plastic; Loren E. Nelson, proctology; Josiah Fuller, thoracic, and Edward J. Richardson, urology.

Hotel reservation forms may be obtained by writing directly to the St. Paul Hilton, St. Paul, Minn. 55101, or Mr. T. E. McGinnis, American College of Surgeons, 55 East Erie Street, Chicago, Ill. 60611. No registration fee is charged. Fellows of the College, members of the Candidate Group, residents or interns who present letters of identification signed by chiefs of surgery or the hospital administrator. Non-Fellows pay \$15.00. Doctors in the Federal Services pay \$7.50.

Dr. Robert J. Kamish, Chicago, assistant director, is in charge of scientific sessions for all Sectional Meetings. Dr. C. Rollins Hanlon, Chicago, is director of the College. Dr. Joel W. Baker, Seattle, is president.

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CHP Study Is Published

The goals, priorities and problem areas of comprehensive health planning are reviewed in a new document issued by the Health Insurance Council.

Entitled "Community Health Action-Planning—Problems and Potentials," the 22-page publication is designed as an introductory guide to planning for business and professional leadership involved in state and community health activities.

Included is information on the history of health planning, key provisions of planning legislation, suggested organization and relationship of health agencies within a state, criteria for effective area-wide planning agencies, priority actions to be taken by agencies, and barriers that may be encountered.

In a concluding summary, the author, David Robbins, Controller and Director of Statistics, Health Insurance Association of America, urges a concerted effort by business executives to help

solve the problems of health facilities, services, manpower and environment.

A special report issued in conjunction with the booklet reviews the progress of the Health Insurance Council Program for Community Health Action-Planning (HiCHAP), noting that "every initial goal of the program has been filled."

The Council, in its report, said that insurance companies representatives serving as HiCHAP coordinators are active in 45 states. Of the Governor's Advisory Councils now formed in 46 states, the District of Columbia, and Puerto Rico under the Partnership for Health law, insurance company executives have been appointed to 35 of these councils, and in eight states serve as chairman.

It further reports that insurance representatives are on the boards and committees of over half of the more than 80 areawide health planning agencies funded to date by the federal government.

Copies of the health planning document and the HiCHAP progress report may be obtained without charge from the Health Insurance Council, 750 Third Avenue, New York 10017.

Announcing the Thirty-Third Annual Meeting of THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

Conference Headquarters—The Roosevelt Hotel—March 2, 3, 4, 5, 1970

GUEST SPEAKERS

John J. Bonica, M.D., Seattle, Wash.

Anesthesiology

John R. Hill, M.D., Rochester, Minn.

Colon and Rectal Surgery

Walter B. Shelley, M.D., Philadelphia, Pa.

Dermatology

H. M. Pollard, M.D., Ann Arbor, Mich.

Gastroenterology

Walter Lane, M.D., Tampa, Fla.

General Practice

Henry Clay Frick, II, M.D., New York, N.Y.

Gynecology

William H. Crosby, Jr., M.D., Boston, Mass.

Internal Medicine

Thomas L. Petty, M.D., Denver, Colo.

Internal Medicine

David N. Danforth, M.D., Chicago, Ill.

Obstetrics

Jack A. Dillahun, M.D., Albuquerque, N.M.

Ophthalmology

John J. Niebauer, M.D., San Francisco, Calif.

Orthopedic Surgery

William K. Wright, M.D., Houston, Tex.

Otolaryngology

Omer E. Hagebusch, M.D., St. Louis, Mo.

Pathology

Chester M. Edelmam, Jr., M.D., Bronx, N.Y.

Pediatrics

Howard P. Rome, M.D., Rochester, Minn.

Psychiatry

Wendell P. Stampfli, M.D., Denver, Colo.

Radiology

Joel W. Baker, M.D., Seattle, Wash.

Surgery

Edwin J. Wylie, M.D., San Francisco, Calif.

Surgery

Ralph A. Straffon, M.D., Cleveland, Ohio
Urology

Lectures, symposia, clinicopathologic conference, round-table luncheons, medical motion pictures, technical exhibits, and entertainment for visiting wives. (All-inclusive registration fee—\$35.00.)

This program is acceptable for twenty-two (22) prescribed hours and nine (9) elective hours by the American Academy of General Practice.

For information concerning the Assembly meeting write Secretary,
The New Orleans Graduate Medical Assembly, Room 1538,
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DATELINE

Pot Policy es Hard Line

Chicago - AMA's new policy position on marijuana minces no words in characterizing cannabis as "a dangerous drug...and a psychoactive substance which can have a marked deleterious effect..." Policy says that sale and possession of marijuana should not be legalized, pointing out that if potency were legally controlled, there would predictably be an illicit market.

Makers Hit ismoking Spots

New York - The Tobacco Institute, trade association for cigarette manufacturers, took full page ads in newspapers to protest what called "untruthful and misleading statements" by American Cancer Society and American Heart Association in forced-free-time commercials discouraging smoking. TI said that such commercials should be stopped. FCC requires networks to give time to offset these pitches equating smoking with outdoors and the good life.

atists Get Blow m HEW, APHA

Washington - After extensive study, HEW has reported to the Congress that chiropractic is quackery and that payment for spine punchers' services should not be made in Medicare program. American Public Health Association followed up by concurring and asking that no payment be made to chiropractors under Title XIX Medicaid. Mississippi program cannot pay cultists under existing law.

al Dogpatch Gets leral Handout

Dogpatch, Ark. - Sen. J. William Fullbright (D., Ark.) has accomplished what Al Capp's mythical Sen. Jack S. (Good Ole Jack S.) Phoghorn and has never been able to do in the popular comic strip, "Li'l Abner": He got \$120,000 in sure 'nuff federal money for Dogpatch, Ark., a private amusement park. Money will provide hillbilly Disneyland water and sewerage services under public health aegis.

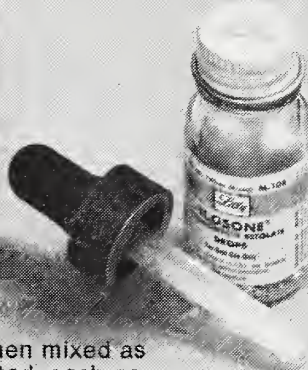
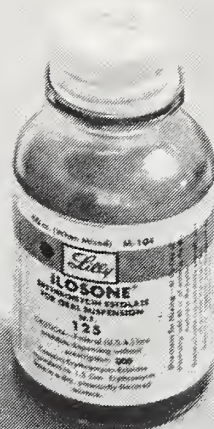
W Disposal Poses alth Problems

Ft. Detrick, Md. - The U.S. Chemical and Biological Warfare Center has the problem of carrying out President Nixon's edict to dispose of the nation's stockpile of CBW weapons. Although top secret, deadly arsenal is known to contain potent strains of anthrax, encephalitis, plague, Q fever, Chikungunya fever, and a host of fatal bugs. CBW will henceforth be confined to defensive research and vaccines.

Each 5 cc. contain
erythromycin estolate
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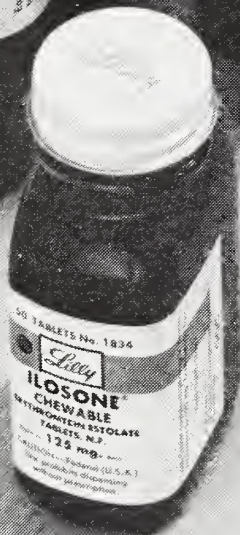


When mixed as directed,
each 5 cc. will contain erythromycin
estolate equivalent to 125 mg.
erythromycin base.

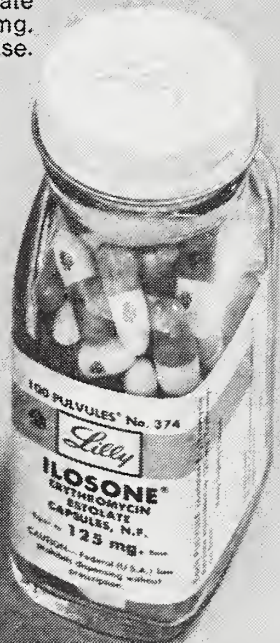


When mixed as
directed, each cc.
will contain
erythromycin estolate
equivalent to 100 mg.
erythromycin base.

Each 5 cc. contain
erythromycin estolate
equivalent to 125 mg.
erythromycin base.



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ORIGINAL PAPERS

Practical Uses of Steroids and Gonadotropins in Obstetrics and Gynecology

VEASY C. B. BUTTRAM, JR., M.D., PAIGE K. BESCH, Ph.D., and
L. RUSSELL MALINAK, M.D.
Houston, Texas

THE OBSTETRICIAN AND GYNECOLOGIST frequently encounters a patient who exhibits signs and symptoms which might indicate an endocrine abnormality. Before undertaking a workup, the physician should know just what tests are available to him, what tests might be of benefit both in the diagnosis and treatment, the time and expenses involved, and how to interpret the laboratory results that he may obtain. The purpose of this paper is to discuss several steroid and gonadotropin determinations that are available to practicing physicians and place emphasis particularly upon their practical use.

Estrogens are phenolic steroids that are secreted by the ovaries, adrenal glands, testicles and the fetal-placental unit. At the present time, there are known to be at least 20-25 metabolites in the urine which can be considered estrogens. The metabolites that are most important are known as E_1 (estrone), E_2 (estradiol) and E_3 (estriol). E_1 and E_2 are primarily secreted by the

ovaries in the non-pregnant female. A small amount of estrone and estradiol can be secreted by the adrenal gland. Estriol in the non-gravid female is produced primarily in the liver from metabolism of estrone and estradiol; in the gravid female, the major portion of estriol is produced in the fetal-placental unit.

The availability and benefit of tests, the time and expenses involved and the interpretation of laboratory results are things a physician must know before undertaking a workup of a patient who appears to have endocrine abnormality. Several steroid and gonadotropin determinations available to practicing physicians are discussed with particular emphasis placed upon their practical use. Diagnostic methods expected to be available in the near future are also considered.

From the Department of Obstetrics and Gynecology, Baylor University College of Medicine.
Read before the Section on Obstetrics and Gynecology, 101st Annual Session, Mississippi State Medical Association, Biloxi, May 13, 1969.

Before an estrogen determination is ordered, it should be emphasized that there are interfering agents which alter the estrogen values obtained from urine. These consist of hormones

which inhibit hypothalamic-pituitary-ovarian function, i.e., contraceptives. The cost of a total urinary estrogen determination ranges from \$15-\$30 and the time involved varies from 4-24 hours. Fractionated estrogens on the other hand costs approximately \$30-\$50, and the time required for such a determination is seven days.

ESTROGEN PEAK

In the pre-menopausal female, estrogen values range from 5-25 μgm per 24 hours. It is well known that the estrogen value is greatest just prior to ovulation. (See Chart I.) LH release and subsequent ovulation is apparently dependent on this peak. There is also a peak of estrogen in the mid-portion of the luteal phase of the cycle. Why females have this second surge of estrogen is not known. It has been theorized that it is due to the release of estrogen from other follicles that were stimulated by FSH in the pre-ovulatory and post-ovulatory phase of the menstrual

cycle which did not mature to the stage needed for ovulation. These follicles persist during the luteal phase of the menstrual cycle, and it is conceivable that they produce estrogen at that time.

The initial peak of estrogen is secreted by the follicle which has been brought to maturity under FSH stimulation and subsequently ovulates following LH release. Thus, during the earlier portion of the menstrual cycle, the estrogen value is at its lowest level and may range from 5-10 μgm for 24 hours (Table I). The level of estrogen during the mid-portion of the menstrual cycle prior to ovulation and during mid-luteal phase may approach the 25 μgm peak. The normal value of estrogen in a post-menopausal woman varies from 5-10 μgm per hour. The major portion of this estrogen comes from the adrenal glands.

The proper clinical use of estrogen determinations in the evaluation and treatment of endocrine abnormalities is variable. In the normal menstruating female an estrogen determination is seldom of benefit in the diagnosis or treatment

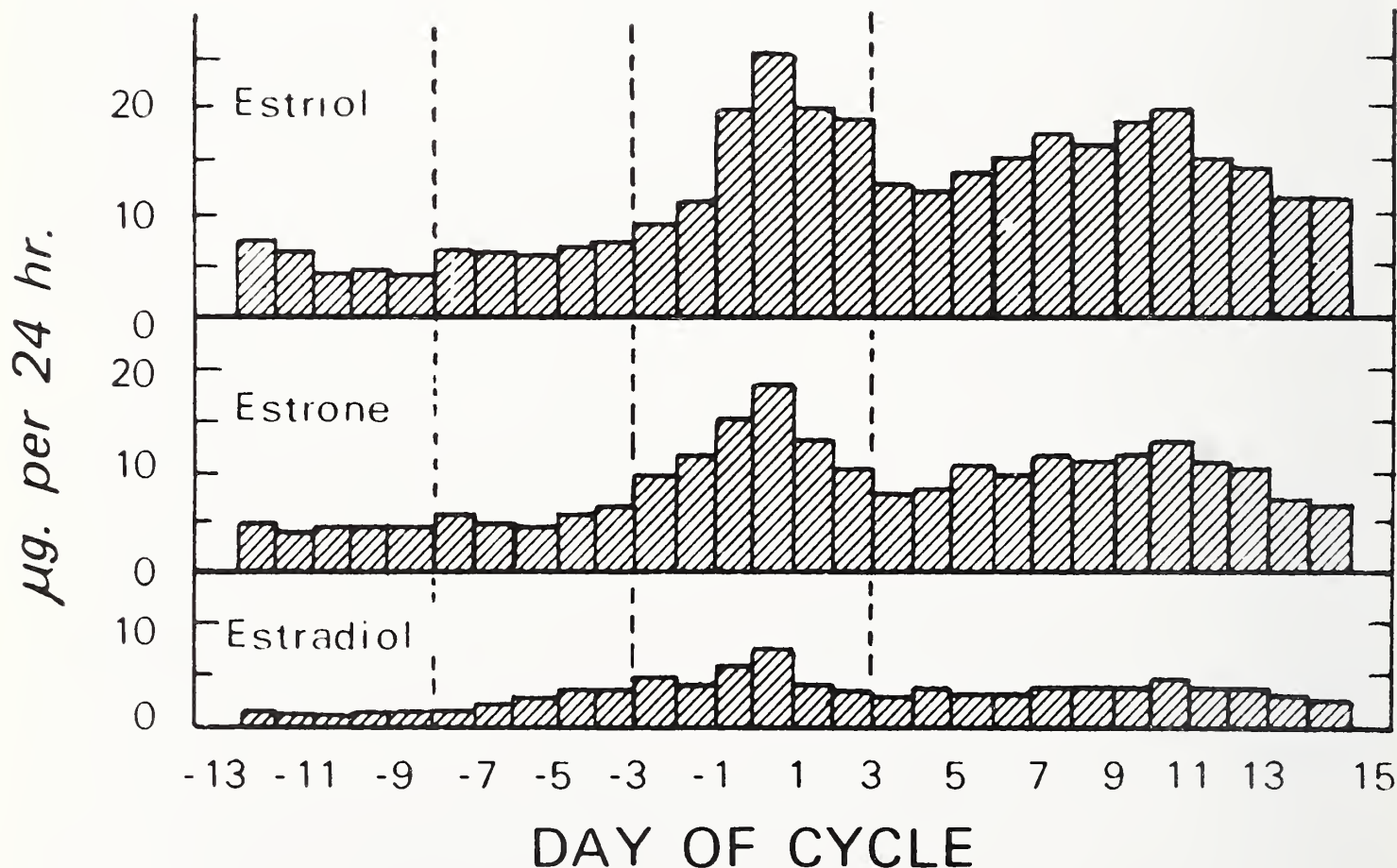


Chart I. The variation of the three major urinary estrogens during the menstrual cycle.

TABLE I
SOME NORMAL URINARY STEROID VALUES IN THE WOMAN

Steroid	Pre-Ovulatory	Post-Ovulatory	Post-Menopausal	Pregnancy
Total Estrogen (μ gm)	5-10	5-25	5-10	8-35 mg*
Pregnanediol (mg)	<0.2	0.8-3.5	<0.5	5-30*
17-Ketosteroids (mg)	5-8	5-15	3-8	5-20
17-Hydroxycorticoids (mg)	3-5	3-8	2-5	3-8
Testosterone (μ gm)	0-10	10-20	10-30	?
HCG	—	—	—	800-100,000 IU*

* These values vary with gestational age.

of an endocrine abnormality. We feel that a woman who is having normal menstrual cycles will have an estrogen level that is within the 5-25 μ gm normal range. Therefore, an estrogen determination would be of little practical value to the physician in this patient. In the amenorrheic female, an estrogen determination may be of some benefit (Table II). Further discussion of the practical use of estrogen will follow the introduction of the gonadotropins.

GONADOTROPIN VALUES

The pituitary gland is the only organ known to produce human pituitary gonadotropins. The interfering agents which alter the urinary values are estrogens, androgens, and progestins. Some of the frequently used tranquilizers, sedatives, and narcotics also interfere; they suppress the hypothalamus or pituitary gland. The cost ranges from \$20-\$35, and the time required for this particular determination is approximately two weeks in most laboratories. This is one of the crudest laboratory determinations. Normal values in the pre-menopausal woman range between 6-48 m.u. per 24 hours and in the post-menopausal female, between 48-192 m.u. per 24 hours. The clinical usefulness is hampered by the

TABLE II
ESTROGENS MAY BE OF VALUE IN
THESE DISORDERS

1. Hypothalamic amenorrhea
2. Amenorrhea-galactorrhea syndrome
3. Hypopituitarism
4. Ovarian agenesis or dysgenesis
5. Premature ovarian failure
6. Congenital absences of the vagina
7. Gonadotropin therapy
8. Estrogen secreting tumors of the ovary
9. Gynecomastia in the male

fact that the determination is so crude. Only values which are extremely high or repeatedly low are of benefit to the practicing physician.

In the normal menstruating female, a total pituitary gonadotropin level is of no benefit in evaluating a problem. If she is menstruating, even if infrequently, she is producing enough FSH to stimulate the follicles to produce estrogen. The urinary gonadotropic (HPG) value would possibly be low but still within normal range. Only in the completely amenorrheic female is the total pituitary gonadotropin determination of any value to the physician. In the menopausal woman or one with ovarian failure, a tremendous increase in the trophic hormones urinary level occurs. In hypothalamic or pituitary pathology, low values for the trophic hormones are expected; this is frequently not the case, however. This is possibly due to the wide range of normal for the test and the low value that is reported to be within normal limits.

NORMAL VALUES

In the hypothalamic amenorrheic syndrome, the amenorrhea-galactorrhea syndrome, or in hypopituitarism, estrogen values are usually in the low normal range. This also is apparently due to the wide range of normal values for urinary estrogen and the fact that the adrenal glands can produce enough estrogen to give a value of 5 μ gm or more. Therefore, the culdoscopic finding of unstimulated ovaries may be of more practical value than an estrogen or gonadotropin determination. These estrogen deficient patients generally respond poorly to Clomid. An estrogen determination might give some prognostic information, as we feel that those individuals who have high normal estrogen values respond much more favorably.

Patients with ovarian agenesis or dysgenesis or premature ovarian failure generally have a low normal or low estrogen level and a high gonadotropin titer. Evaluation of the vaginal mucosa for estrogen effect is as beneficial as an estrogen determination in the above-mentioned problem and is less expensive.

In those rare cases of congenital absence of the vagina, where a vaginal smear cannot be obtained, an estrogen determination may be of some benefit to the physician. A high normal estrogen level would indicate that ovaries are present. A urinary cytogram for estrogen effect may also be of value.

GONADOTROPIN THERAPY

In the recent past, gonadotropin therapy has been used with qualified success in infertile patients with low gonadotropic hormone release. At the present time, it is difficult to know just how much FSH to administer and the amount required varies considerably in each individual. Estrogen values during and following gonadotropin therapy have been of some benefit. During gonadotropin therapy, the estrogen value should rise. Evaluation of this estrogen output is beneficial in evaluating further FSH need. However, because estrogen determinations are time consuming and costly; their use in patients receiving gonadotropin therapy has been less than ideal.

Occasionally, an estrogen secreting ovarian tumor may be diagnosed by estrogen determinations. Generally, this is not the case. Most pa-

tients with ovarian tumors that secrete estrogen will have a palpable adnexal mass. Following excision of a functioning ovarian tumor, subsequent estrogen determinations might indicate recurrence or metastatic disease. Likewise, in male patients with gynecomastia, an estrogen determination may be of some benefit in both diagnosis and treatment.

PRACTICAL USES

The greatest practical use of estrogen determinations is in the pregnant female. Placental insufficiency may be associated with postmaturity, dysmaturity, diabetes, and toxemia of pregnancy. The estrogen values in pregnancy are increased 1,000 fold over those in the non-pregnant female. Recent investigations indicate that urinary estrogen levels in the third trimester of pregnancy are indicative of feto-placental well being. It is important that frequent determinations be obtained; delivery of the infant should be considered when an estrogen value drops 50 per cent or more. The total estrogen value is not as important as is a decrease which is noted on serial determinations. In some cases, fetal death in utero may be diagnosed by a low estrogen level. Also, it has been recommended by some authors that estrogen values accurately reflect fetal size and should be performed on any patient prior to elective repeat cesarean section.

Progesterone is known to be produced in the ovary, adrenal, testes, and placenta. There are more than 20 compounds in the urine which can be considered progesterone metabolites; of these, pregnanediol (P_2) is the most important. (See

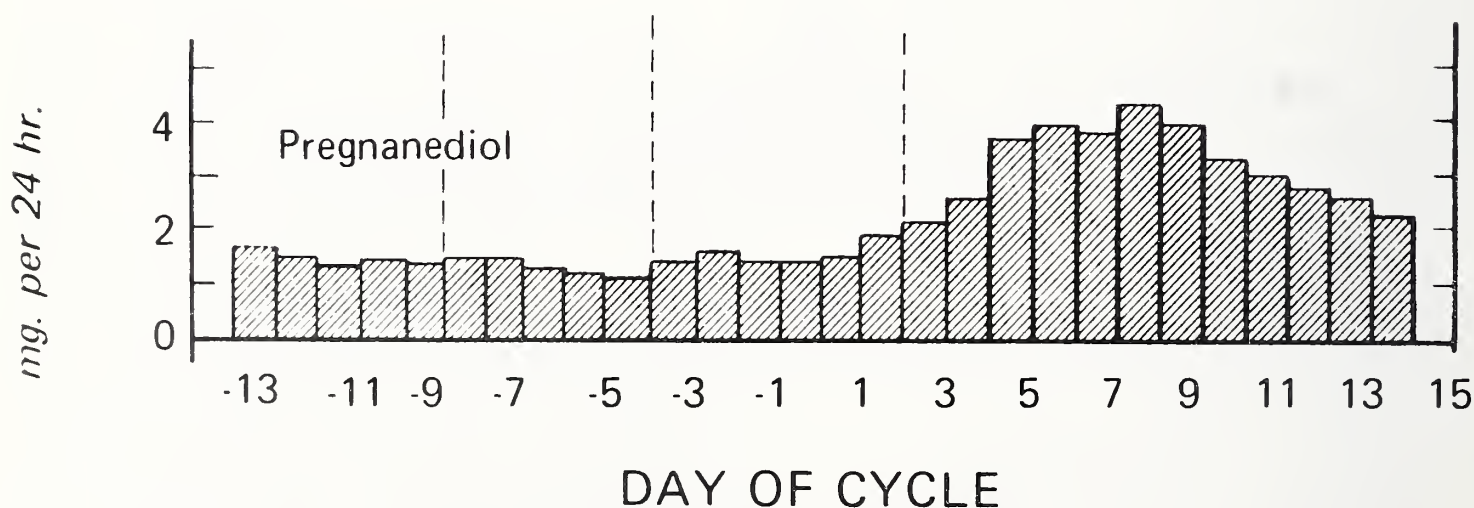


Chart II. Urinary pregnanediol excretion throughout the normal cycle.

Chart II.) Any agent which contains estrogen, progesterone or androgen can suppress the hypothalamus and the pituitary gland and thus interfere with the pregnanediol determination. The cost of this test is approximately \$15 and the time required is two days (Table II). The non-gravid female excretes 0.5-0.9 mg pregnanediol each 24 hours in the follicular phase of the menstrual cycle and 0.9-3.5 mg each 24 hours in the luteal phase. In the pregnant female, the pregnanediol values increase approximately 2.75 mg/24 hours each gestational month. The normal day-to-day variation in excretion is considerable; thus the test is of little value.

There is no practical value of pregnanediol determinations in pregnancy. It has been felt that the P_2 value was indicative of fetal-placental well being. Recent investigations have virtually disproved this hypothesis. In the menstruating female, the pregnanediol value may be of some benefit for detection of ovulation, but other tests such as basal body temperatures or endometrial biopsies are as enlightening and less expensive. In the amenorrheic female, P_2 values are never of benefit, simply because the amenorrheic patient rarely ovulates.

STEROID METABOLISM

Urinary 17-hydroxycorticoids are produced only from the metabolism of steroids produced in the adrenal glands. There are many compounds in the urine which react chemically as 17-hydroxycorticoids. The interfering agents are iodides, paraldehyde, chloral hydrate, sulphur drugs, chlorophenothiazine, spironolactones, Furadantin, quinine, colchicine, Darvon, bilirubin, glucose, coffee, spinach, and others. Stress may cause an increase in 17-hydroxycorticoids. When the patient enters the hospital for endocrine evaluation, she is generally anxious; thus a temporary increase in 17-hydroxycorticoids may occur. The cost of this procedure is approximately \$15, and the time involved is usually three days. The normal values vary with each laboratory. Generally, 5-10 mg. per 24 hours is considered normal for a male and 2-8 mg. per 24 hours for a female.

The clinical use of 17-hydroxycorticoids is related to its value as a screening procedure for adrenal disorders. In Cushing syndrome in which an over-production of cortisol occurs 17-hydroxycorticoids are increased. In congenital and acquired adrenal hyperplasia, the 17-hydroxycorticoids are normal or low normal. These patients have compensated for their enzymatic de-

fect and thereby produce enough hydrocortisone to survive. In Addison's disease and panhypopituitarism, low normal or slightly subnormal levels are found. These values are only suggestive, not diagnostic. Also, Addison's disease and panhypopituitarism cannot be differentiated by a 17-hydroxycorticoid value alone.

ORIGIN OF 17-KETOSTEROIDS

Origins of 17-ketosteroids are the ovaries, adrenal glands, testicles and placenta. There are a number of 17-ketosteroids in the urine but only seven are of importance. Among the interfering agents are such substances as ascorbic acid, Dorden, morphine, mephrobamate. Stress may also give false high values. The cost ranges from \$7.50-\$15 and the time required is around two days. Most procedures used to detect urinary 17-ketosteroids are very crude, and at best the determination is a measurement of weak androgens produced in the body. Twenty to 40 per cent of the 17-ketosteroid values may be non-specific urinary chromogens. For example, of 12 mg/24 hours for a female, 2-4 mg. of this determination may be interfering urinary chromogens that are not 17-ketosteroids. The normal values vary with the laboratory; the male range is 8-20 mg. per 24 hours, and that of the female is 5-15 mg. per 24 hours.

As with the 17-hydroxycorticoids, 17-ketosteroids are used primarily as a screening procedure for adrenal pathology. When an increase in 17-ketosteroids is obtained, it should be assumed that the problem lies in the adrenal gland until proven otherwise. Secretion of 17-ketosteroid increases in adrenal tumors, Cushing syndrome, congenital adrenal hyperplasia and possibly in acquired adrenal hyperplasia and borderline adrenal dysfunction. In Addison's disease and panhypopituitarism low normal to sub-normal values of 17-ketosteroids are present. Although ovarian pathology may cause an increase in 17-ketosteroids, this is generally not the case. Elevated 17-ketosteroid values are occasionally associated with adrenal rest tumors of the ovaries or arrhenoblastomas. A discussion of 17-ketosteroid values in patients with enzymatic pathology of the ovaries and/or the adrenal glands will appear later in this paper.

Testosterone can be produced in the ovaries, testicles and probably to a small degree by the adrenals. Precursors of testosterone are produced abundantly by each of these glands. Conversion of these precursors to testosterone may

take place in the liver and other peripheral sites. The interfering agents are corticoids, estrogens, progestins, and androgens, as these may alter the biosynthesis of the secreting endocrine gland. The cost varies from \$35-\$55, and the time required is approximately two weeks. Testosterone is not a 17-ketosteroid. It is present both in the urine and the plasma. Androstenedione is a 17-ketosteroid which is found only in the plasma. Dehydroepiandrosterone (DHEA) is the most androgenic 17-ketosteroid found in the urine. If testosterone is given an androgenicity value, androstenedione is one-tenth and DHEA is one-thirtieth of that value. The metabolism of these compounds are shown in Chart III. Urinary 17-ketosteroids are measurements of the weakest androgens produced in the body and do not reflect unmetabolized androstenedione or testosterone. The normal values for urinary testosterone in the male are 30-200 μgm for 24 hours and 0-20 μgm for 24 hours in the female. In the plasma, the value is approximately 0.68 μgm and 0.10 μgm respectively. In the normally menstruating female, testosterone levels vary throughout the menstrual cycle; the peak of testosterone is around the time of ovulation, apparently stimulated by the LH peak.

Metabolism of Some Endogenously Produced Androgens

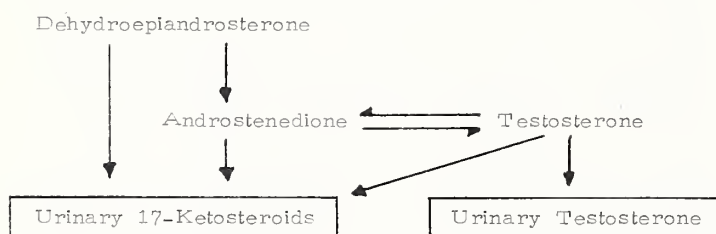


Chart III. Metabolism of some endogenously produced androgens.

Testosterone determinations are useful in differentiating ovarian from adrenal pathology. When a major enzymatic deficiency exists in the ovary, excess androgen production occurs generally in the form of elevated testosterone. Occasionally, both testosterone and 17-ketosteroids are elevated. When a major enzymatic deficiency exists in the adrenal gland, excess androgen production occurs generally in the form of elevated

17-ketosteroids. Occasionally, both testosterone and the 17-ketosteroids are increased. Using these generalizations, a differentiation between primary ovarian and primary adrenal enzymatic pathology can usually be made. When an enzymatic deficiency in either gland is so mild that it cannot be detected by measurement of testosterone or 17-ketosteroids, a diagnostic dilemma is present. A similar diagnostic problem arises when enzymatic deficiencies are present in both endocrine glands.

URINARY TESTOSTERONE

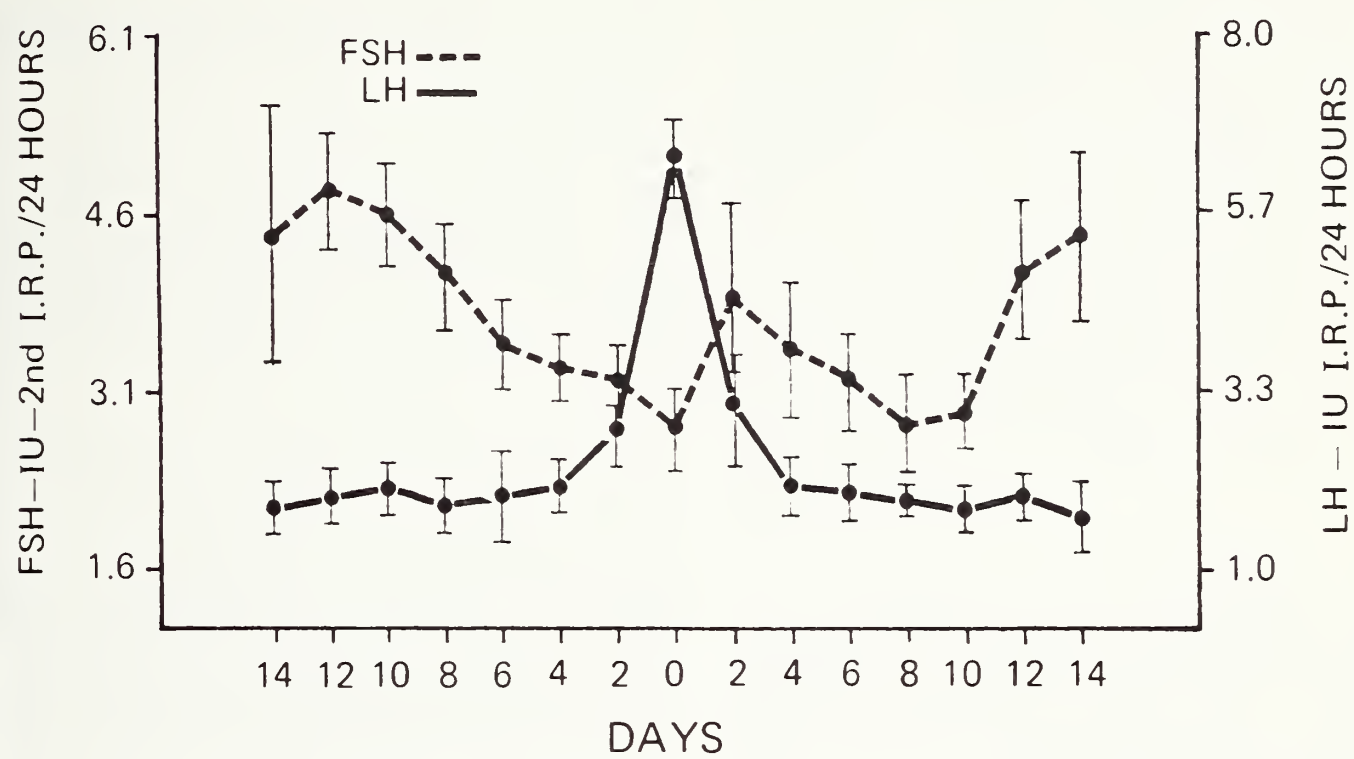
Androgen secreting ovarian tumors, such as arrhenoblastoma and hilus cell tumors, are generally associated with an increase in urinary testosterone. These particular tumors may cause no increase in 17-ketosteroids. In contradistinction, adrenal tumors usually secrete a large amount of 17-ketosteroids and little testosterone. Plasma testosterone values have not as yet been well correlated with disease processes.

Human chorionic gonadotropin is produced by the placenta. There are multiple methods of detection of this trophic hormone. The hemagglutination tests have a sensitivity as low as 800-1000 IU of HCG. The time required is generally 2-4 hours and the approximate cost is \$5. The latex agglutination tests have a sensitivity as low as 2000 IU of HCG and the time required is 2-3 minutes; the cost is around \$3. The complement fixation test is rarely used today. The radioimmunoassay technique, which is relatively new, is very specific and sensitive, and can detect HCG values as low as 0.06 HCG per ml. of serum. The bioassay techniques used in the past were fairly specific and quantitative for HCG but due to the crudeness and the methodology involved, these techniques are currently seldom used.

LH AND HCG DETERMINATIONS

Lutenizing hormone (LH) and human chorionic gonadotropin (HCG) crossreact immunologically. Thus, 10 units of LH plus 10 units of HCG react immunologically as 20 units. In the normally menstruating female, the peak of LH is around mid-cycle and ranges from 200-300 IU HCG (Chart IV). In the post-menopausal female, the LH value may be 600 IU HCG. If a sensitive immunological test for HCG is used, a positive pregnancy test in a post-menopausal female may occur when the LH titer approximates 600-800 IU HCG. HCG titers are detectable on the 24th day of pregnancy; by day

MEAN URINARY EXCRETION OF FSH & LH ACTIVITY ARRANGED ACCORDING TO THE DEVIATIONS FROM THE TIME OF MAXIMAL LH EXCRETION IN EACH CYCLE (64 NORMAL CYCLES)



Composition pattern of FSH and LH excretion. Vertical lines represent the standard error. (From Stevens, 1966.)

Chart IV. Pattern of LH & FSH during the normal cycle.

30, there is a 100-fold increase, and by day 42. the value is increased some 3000 fold. The peak of HCG is noted around the 50th-70th day of gestation.

The best clinical use of HCG determinations is in diagnosis of pregnancy. If a sensitive technique is used properly, a positive pregnancy test occurs by day 30 of the menstrual cycle or 16 days after conception. Most physicians delay this determination until day 42 because some women ovulate later than day 14.

This test is useful in the diagnosis of hydatidiform mole and choriocarcinoma; it must be stressed, however, that very high levels of HCG may occur in normal pregnancy during the third month. The post-treatment care of the patient with trophoblastic disease is enhanced by very sensitive techniques for HCG determinations.

In the near future, the obstetrician and gynecologist

will have several new methods for steroid and gonadotropin determination which will aid both in diagnosis and treatment of endocrine abnormalities. The competitive protein binding technique for estrogen, progesterone and testosterone appears to be a very rapid, accurate and sensitive method for detection of these steroids, although it is still in the early stages of development. The radioimmunoassay for FSH and LH and other trophic hormones is also in its infancy. This technique is complex but holds a lot of promise for all physicians and individuals interested in the field of reproductive physiology. Production and secretion rates are complicated and have not to date been useful in clinical obstetrics and gynecology. Conversion studies of steroids are also complex, but they appear promising for future practicing physicians. ★★★

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Acute Illness Among Returnees From Vietnam

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IT IS ESTIMATED THAT, during 1970 more than 6,000 Mississippians will be returning to the United States after completing a 12-month tour of duty in Vietnam. Traveling by jet, these troops may arrive home during the incubation period of a number of tropical diseases.

Those who have engaged in combat in the Central Highlands of South Vietnam probably have been exposed to virulent strains of *Plasmodium falciparum* malaria. These troops have been taking a tablet containing 300 mg. Chloroquine (base) and 45 mg. primaquine (base) once weekly as chemoprophylaxis. Some are receiving a daily dosage of 25 mg. of diaminodiphenyl-sulfone (Dapsone) as a third chemosuppressive agent. On being rotated from Vietnam, each individual is issued a supply of the chloroquine-primaquine tablets with instructions to take one each week for eight weeks. He is warned not to use these combined tablets for the therapy of any clinical illness because of the hemolytic potential of the larger dosage of primaquine involved. Most returning troops are also given a supply of Dapsone tablets and instructed to take one daily (in addition to the weekly doses of chloroquine-primaquine) for 28 days after leaving the high-risk area.

Because certain strains of *P. falciparum*, found in Southeast Asia (and in South America), are resistant to chloroquine, as well as to almost

all of the synthetic antimalarials including Quinacrine, Proguanide, Pyrimethamine, Amodiaquine, and Primaquine, some of these returnees will experience clinical disease due to *P. falciparum*. These infections may show little

Troops returning by jet to the United States from service in Vietnam may easily arrive home during the incubation period of a number of tropical diseases. The author discusses the symptoms and treatment of malaria, melioidosis, leptospirosis, tsutsugamushi disease, Japanese B encephalitis and other communicable diseases found in Vietnam.

clinical improvement or drop in parasitemia levels after 1.5 gm. (base) of chloroquine in three days. Parenteral administration of chloroquine also proves ineffective. Recrudescence rates range from 50 per cent to 80 per cent after chloroquine therapy.

Fatalities due to *P. falciparum* malaria have been increasing in the USA during the past few years. Dangerous levels of parasitemia occur with incredible rapidity, leading to complications such as cerebral malaria, acute renal insufficiency, massive intravascular hemolysis, disseminated intravascular coagulation, or acute pulmonary edema with pleural effusion.

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Read before the Section on Preventive Medicine, 101st Annual Session, Biloxi, May 14, 1969.

A high index of suspicion for malaria must be maintained when troops from Southeast Asia become ill. This also holds true for tourists, seamen, Peace Corps volunteers and airline crews. Repeated thick as well as thin blood smears should be obtained and studied, in order to rule out malaria, in any illness developing among such personnel. An accurate species diagnosis is necessary since the drug of choice for Vivax or Quartan malaria is still Chloroquine, 1.5 gm. of the base (or 2.5 gm. of the salt) in 3 days. Then Primaquine 15 mg. daily for 14 days, being effective against the exoerythrocytic or tissue stages or all malaria species, usually accomplishes a radical cure of *vivax* and *quartan* malaria.

For chloroquine resistant strains of *P. falciparum* malaria, combined drug therapy utilizing at least two antimalarials is required, at least until more ideal therapy is available. Currently quinine is once again the drug of choice for any individual who subsequently develops *P. falciparum* malaria contracted in Southeast Asia. Quinine, 650 mg. every eight hours, for 10 days (total 20 gm.) is given concurrently with pyrimethamine 25 mg. twice daily for the first three days (total 150 mg. in 3 days). Beginning on day seven diaminodiphenylsulfone, (currently available only in military hospitals) 25 mg. daily, is begun and continued for the next four weeks (28 days).

FALCIPARUM MALARIA

In patients seriously ill with *falciparum* malaria, marked electrolyte and hemodynamic changes occur. Careful monitoring of fluid intake and output and daily recording of body weight is indicated. In the critically ill, measurement of central venous pressure is helpful in the avoidance of fluid overloading.

If oliguria develops the use of the osmotic diuretic mannitol, following adequate hydration, appears helpful in restoring sufficient urine output to prevent oliguric renal failure. However, if a test dose of 20 gm. (as a 20 per cent solution) of mannitol does not produce a urine volume of at least 60 ml/hr for each of the next two hours, fluids should be restricted and the patient treated as for acute renal failure.

Dennis *et al.* have demonstrated a rapid consumption of coagulation factors plus evidence of a defibrination syndrome in patients critically ill with *P. falciparum* malaria. In view of this evi-

dence that disseminated intravascular coagulation occurs in such patients, the cautious administration of heparin (0.5 mg/kg intravenously every eight hours) would appear to be indicated. Both animal and clinical experience support this.

In cerebral malaria, or when the acutely ill *falciparum* malaria patient is unable to take or retain quinine orally, the initial dosage of quinine should be given intravenously. Rapid intravenous administration of quinine may prove disastrous. If given slowly, preferably by infusion, in dosage not exceeding 640 mg. every eight hours, the drug is well tolerated, provided urine output is adequate. If severe oliguria or anuria is present, dangerous quinine blood levels may result. Oral administration is to be resumed at the earliest practicable moment.

MASSIVE HEMOLYSIS

Massive hemolysis with marked hemoglobinuria has occurred in nonimmune American soldiers during the primary attack of *P. falciparum* malaria, with or without quinine therapy. The use of adrenal steroid therapy, such as dexamethasone, has appeared to be useful. Carefully matched transfusions, preferably of packed erythrocytes, may be useful in correcting anemia that is of life threatening severity. If the blood smear shows parasitemia, quinine should be cautiously administered. In many of the "blackwater fever" cases in or from South Vietnam, parasitemia has been demonstrated.

Dexamethasone has been effective in the management of the cerebral edema occurring in cerebral malaria. Rapid reversal of choked discs and clearing of the sensorium has been noted. In the management of a person having just returned from South Vietnam, who is acutely ill with *falciparum* malaria, a careful search also is indicated for complicating or coexisting acute infectious diseases.

AVAILABILITY OF QUININE

A brief telephone survey of hospital pharmacies in Mississippi failed to locate quinine dihydrochloride for intravenous use, except for the Veterans Administration Hospital in Jackson. Quinine sulfate for oral use was available in only a few. It is suggested that preparations of quinine for both oral and intravenous use be stocked in every pharmacy for emergency therapy of chloro-

VIETNAM RETURNEES / Blount

quine resistant strains of *falciparum* malaria. It is further suggested that valuable time not be lost by the trial of chloroquine therapy for *P. falciparum* malaria imported from Southeast Asia.

Anopheline vectors are present in some parts of every one of the continental United States. Thus there is the possibility of these indigenous vectors becoming infected with not only *P. vivax* gametocytes, but with gametocytes of chloroquine resistant strains of *P. falciparum* malaria. This could lead to outbreaks of malaria due to mosquito transmission of these introduced strains of malaria.

Fortunately, it has been proven that one dose of 45 mg. of primaquine base will render adult gametocytes non-infective for mosquito vectors for a period of at least 12 days. If each individual, returning from Southeast Asia, will take one chloroquine primaquine tablet each week for eight weeks, as instructed, the sporontocidal effects of primaquine should effectively prevent infection of indigenous anophelines. This at least reduces the threat of malaria once again becoming endemic in the United States.

MELIOIDOSIS

Another disease that should be suspected in any febrile returnee from Southeast Asia is melioidosis. This disease, endemic in Southeast Asia, is caused by the motile, bipolar, poorly staining gram negative bacillus *Pseudomonas pseudomallei*. Some 100 cases were recognized in the French forces in Indochina between 1948 and 1954. Approximately 140 cases have occurred in American Armed Forces personnel. There is serological evidence of many inapparent infections especially among the South Vietnamese. The clinical manifestations are protean, ranging from a fulminant septicemia, with multiple visceral and cutaneous abscesses as well as pneumonia, to a relatively mild pulmonary infiltrate that may mimic tuberculosis. Acute suppurative arthritis, cutaneous ulcers, osteomyelitis, or draining sinuses of skin, muscle and bone may appear. Several recent burn evacuees to the Brooke Army Burn Center, all without evidence of pulmonary lesions, have developed septicemia due to *Ps. pseudomallei*.

The organism is often easily recovered, using ordinary culture media from sputum, cutaneous and other abscesses, or ulcers, or from the blood

stream. Whitish mucoid colonies develop characteristic wrinkling within 4 or 5 days. The culture medium of choice appears to be eosin methylene blue (EMB), and the initial culture has invariably required a minimum of 48 hours incubation. Serologically, culture proven cases usually develop hemagglutination titers of 1:40 and above, and complement fixation titers of 1:8 or above.

FULMINANT INFECTIONS

Most of the fulminant infections with high spiking fever, septicemia and multiple visceral abscesses have occurred in troops in South Vietnam. So far in the United States, except for the burn cases, the few returnees from South Vietnam who have developed clinically proven melioidosis usually have shown an onset with fever, and cough, productive of scanty purulent blood streaked sputum, together with pleuritic pain. Chest films in those with pulmonary changes have shown infiltrates varying from diffuse irregular nodular densities to an almost lobar pneumonic consolidation. Cavitary lesions are not infrequent. Most of these cases have shown rapid improvement on full doses of multiple antibiotic therapy. Based on sensitivity studies and clinical observations, effective antibiotics in therapy of melioidosis are tetracycline, chloramphenicol, kanamycin, novobiocin, and sulfisoxazole. Almost uniform resistance has been observed against penicillin, ampicillin, cephalothin, colistimethate and streptomycin.

In the critically ill patient, massive doses of a combination of antibiotics such as chloramphenicol, tetracycline and sulfisoxazole, have led to recovery in few cases, but these fulminant infections have shown a high mortality rate. In most of the returnees to the United States, the illness has shown a subacute pulmonary lesion, responding well to combinations of antibiotic therapy. Bennett of the Communicable Disease Center has reported that chloramphenicol and kanamycin in combination are antagonistic, at least *in vitro*.

LEPTOSPIROSIS

Clinical cases of leptospirosis varying in severity from mild episodes of an "aseptic meningitis"-like syndrome to an icteric state with severe liver and kidney involvement may occur in men who have served in the Mekong Delta. A large proportion of infections are inapparent.

The signs and symptoms of leptospirosis are generally non-specific. After an incubation period usually of 10-12 days, but ranging from 3 to 30 days, the onset may be insidious or abrupt. A rising fever accompanied by chills, myalgia, headache, and malaise is common. An early leptospiremia persists for approximately 6 to 8 days, occasionally for two weeks. During the first week the organisms may sometimes be found in the cerebrospinal fluid. Fever of 102 to 104 degrees F may persist for several days to a week. During the leptospiremic period conjunctival suffusion, retro-orbital pain, pharyngitis, muscle tenderness, nausea, vomiting, abdominal pain, relative bradycardia, adenopathy and nuchal rigidity are frequently noted. Signs of meningeal irritation usually appear early and often become pronounced during the second week. There is increased spinal fluid pressure and a delayed appearance of lymphocytic pleocytosis. In milder cases of leptospirosis, meningeal signs frequently dominated the clinical picture. Such cases probably might have been termed "aseptic meningitis" a few years earlier.

CLINICAL IMPROVEMENT

With the disappearance of leptospiremia, clinical improvement occurs, although a secondary febrile episode may appear. By the 6th to 10th day detectable antibodies are present. Full recovery usually occurs within two weeks in mild cases. Leptospiras appear in the urine after the first week of illness. Shedding of leptospiras in the urine is more pronounced the first weeks after clinical improvement is noted, but may occur intermittently for three or more months thereafter. In milder cases, a slight leukopenia occurs. Where there is liver involvement, the white cell count may be elevated (above 15,000 cells per cu. mm.) with neutrophilia. Renal findings vary from a mild transient proteinuria, usually noted in benign leptospirosis, to a severe nephritis with hematuria, casts, and oliguria, or even anuria.

Severe nephritis frequently is noted in the icteric form of leptospirosis. Jaundice in these cases usually develops in the middle or latter part of the first week. The liver becomes enlarged and tender. Mucous membrane and cutaneous ecchymoses are frequent, and gastrointestinal hemorrhage can occur. The mortality in jaundiced patients who are severely ill ranges from 50 to 30 per cent. Fatal anicteric cases are extremely rare.

Paired or serial sera specimens may reveal a 4 fold (diagnostic) rise in agglutination or com-

plement fixation titer. *Leptospira* may be isolated by culture or animal incubation of blood or cerebrospinal fluid in the first week of illness, or from urine after the first week. Fluorescent antibody technics are very promising.

No really effective specific therapy is available. Penicillin is apparently useful only when administered in the first 48 hours of illness.

TSUTSUGAMUSHI DISEASE

Tsutsugamushi Disease (scrub typhus), a mite-borne rickettsial disease, was seen in great numbers by medical officers in the South and Southwest Pacific in WWII. Cases currently appear among troops who have been operating in certain grasslands areas of South Vietnam. A small eschar 0.5 to 1.0 cm. in diameter usually indicates the site where the infected mite took a blood meal. On or about the 5th day of this febrile illness a faint erythematous macular rash may appear for a few hours. The leukocyte count is usually not remarkable. Paired sera should be obtained and a four-fold rise in the OXK (Weil-Felix) titer is considered diagnostic. A rise in OXK titer may also occur in leptospirosis and in mite-borne relapsing fever. Tetracycline usually produces a prompt defervescence. Tetracycline therapy does not prevent a subsequent diagnostic rise in serologic titer. The mortality rate from clinical illness due to the South Vietnam strain of *Rickettsia tsutsugamushi (orientalis)* is quite low compared to that of strains found in the Southwest Pacific.

JAPANESE B ENCEPHALITIS

A very few cases of Japanese B encephalitis have occurred among American troops in South Vietnam. This mosquito-borne virus disease may present as a severe diffuse encephalomyelitis. Many inapparent infections may occur simultaneously. Paired sera should be obtained for serologic diagnosis.

Complement fixing or neutralizing antibodies develop. The virus can be often recovered from the brain of fatal cases. Therapy is symptomatic and supportive.

Some intestinal helminthiasis may be expected among Vietnam returnees. Hookworm infestation may be responsible for considerable epigastric distress. With the stools showing occult blood, the diagnosis of peptic ulcer has been suspected. In a number of cases, a peripheral blood eosino-

VIETNAM RETURNEES / Blount

philia has directed attention to the possibility of intestinal parasitism. Ascariasis, strongyloidiasis and trichuriasis may also appear among returnees.

TROPICAL SPRUE

A few cases of tropical sprue have been recognized among American service men returning from Vietnam. Should such a returnee show a persistent diarrhea, and no demonstrable pathogens, a d-xylose absorption test is indicated. A Sudan IV stain of a fecal smear may show neutral fat globules, or fatty acid crystals. A biopsy specimen of jejunal mucosa may show villous atrophy, or flattening. Cases of tropical sprue usually fail to respond to a gluten free diet. Most of the cases from South Vietnam have responded to 15 mg. daily dosage of folic acid given over a 12-week period. The acutely ill patient with severe diarrhea and weight loss should also be given tetracycline 1 gm. daily for 30 days followed by 0.5 gm. daily for another 5 months plus folic acid, 15 mg. daily and vitamin B₁₂ 30 micrograms intramuscularly each week for six months.

HIGH PLAGUE INCIDENCE

With an enormous plague infected rodent reservoir in South Vietnam, a high incidence of plague among the Vietnamese is not unexpected. American troops have received an effective plague vaccine and so far have developed only three clinical cases of the disease. Two of these presented with fever and inguinal adenopathy; all three cases survived. Plague should be suspected in any returnee who develops a febrile illness and a regional adenopathy within 10 days of his departure from Vietnam. Needle aspiration of the bubo may permit recovery and identification of the *Pasteurella pestis* by smear, culture, and/or animal inoculation. Immunofluorescent staining provides a highly specific, quick and reliable means of diagnosis. Although strains of *P. pestis* in South Vietnam have shown some increase in resistance to streptomycin *in vitro*, this

antibiotic is still the drug of choice. Large doses (0.5 gm. IM of 3 h for 2 days followed by 2 gm. daily for 10 days) are recommended.

TUBERCULOSIS

There is a high incidence of tuberculosis among the Vietnamese. Many American troops have been tuberculin tested. Those with records of negative intradermal tuberculin (purified protein derivative) should be retested annually for several years. Those with positive intradermal tests should have annual chest x-rays. Recent converters should be treated.

Schistosomiasis has not yet proven to be endemic in South Vietnam. Infectious hepatitis in a relatively mild form has occurred in American troops. Leprosy does occur among the Vietnamese, but the incidence of leprosy among American returnees is expected to be infinitesimally low.

Other infectious diseases endemic in South Vietnam are essentially cosmopolitan in occurrence and have not been discussed. ★★★

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Modern Concepts in Treatment Of Respiratory Insufficiency

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Jackson, Mississippi

IN THE PAST SEVERAL YEARS there has been a great emphasis on the treatment of respiratory insufficiency. This has come about for several reasons. First, there is an increasing incidence of obstructive lung disease in the population in general. Second, there is increased information coming from the research lab, leading to improved knowledge in the complex problems involved in respiratory insufficiency. Third, better instruments are available giving quicker results on various parameters used to follow the patient with this condition. Finally, there is increasing sophistication in the instruments and machines used in managing these patients. All of these factors have culminated in improved methods in caring for the patient with respiratory insufficiency.

Respiratory failure is not a disease per se, but a syndrome of ineffective lung function due to many causes. The literature defines respiratory failure in terms of a PO_2 less than 50 mm. Hg. and/or PCO_2 greater than 50 mm. Hg. This suffers the same drawback as trying to define uremia as a BUN above a certain number or congestive heart failure as an end-diastolic pressure of greater than a certain figure. Nevertheless, we need specific values in order to quantitatively appraise the problem.

For the most part respiratory failure is thought of as the end result of obstructive lung disease. However, there are numerous causes of respiratory failure which may be a result of dysfunction

of any of the organs responsible for respiratory effort.

In the brain, the respiratory center is responsible for initiating the inspiratory effort. Though many things are known to act on this center,

Many changes in the handling of patients with respiratory insufficiency have developed in the last several years as a result of improved understanding of the pathophysiology of the problem. The causes of respiratory failure are reviewed and management discussed.

there remains a large gap in the knowledge of this complex system. Among the conditions known to affect the respiratory effort are primary alveolar hypoventilation, and its related condition, the Pickwickian syndrome. Overdosage of certain drugs including sedatives, tranquilizers and narcotics are known to depress respiration. Additionally, certain other conditions such as brain trauma and cerebrovascular accidents may well be a cause for respiratory insufficiency. The spinal cord may be involved with a number of conditions such as poliomyelitis, Guillain-Barre syndrome, trauma and spinal anesthetics. Peripheral neuritis and myasthenia gravis may cause respiratory failure.

Distortion of the thoracic cage with kyphoscoli-

Read before the Section on Medicine, 101st Annual Session, Mississippi State Medical Association, Biloxi, May 14, 1969.

osis, various kinds of trauma and especially the flail chest may lead to under-ventilation. Changes occurring in the pulmonary circulation, which may include pulmonary embolus, and acute left ventricular failure, caused by myocardial infarction, may precipitate respiratory failure. Finally, the many types of lung disease including pneumothorax, pleural effusion, progressive pulmonary fibrosis and obstructive lung disease may all eventuate in respiratory failure. So it is obvious that any condition of proper severity involving any of the organs effecting the respiratory system may produce a state of respiratory insufficiency.

Oxygenation of the body is one of the two main functions of the lung. Several terms which are used in describing the state of oxygenation include oxygen content, oxygen saturation, and oxygen partial pressure. The oxygen content is the actual volume of oxygen per 100 cc. of blood. In normal arterial blood this is 19.5 cc. per cent, assuming a normal hemoglobin of 15 gm. Any reduction of hemoglobin would reduce the oxygen content of blood. Normal oxygen saturation is 95 per cent, indicating 95 per cent of the hemoglobin in the arterial system is saturated with oxygen.

OXYGEN PRESSURE

The partial pressure of oxygen relates to the amount of dissolved oxygen in the plasma and is directly related to the oxygen saturation. It is the partial pressure of the oxygen which is important, for it is the pressure gradient from the lung to the capillary which is responsible for the passage of oxygen across the alveolar-capillary membrane. Likewise, the pressure gradient at the systemic capillary level is responsible for the oxygen passing from the peripheral capillary into the tissues. The recent availability of the Clark electrode to measure PO_2 directly in arterial blood makes this measurement much easier. Normal values for arterial blood is 85 to 95, decreasing slightly in the older patient.

The diagnosis of hypoxemia presents many problems. The hypoxemic patient may demonstrate irritability, slight confusion, a loss of judgment, especially in dangerous situations, and perhaps even violent behavior. The only specific clinical sign of hypoxemia is cyanosis, which occurs only in the severely hypoxemic patient. The only accurate method of diagnosing this problem is arterial blood gas measurements.

What levels of hypoxemia may be dangerous?

Hypoxemia occurs at a PO_2 of about 60. Cyanosis, which is the only definite sign of hypoxemia, occurs at a PO_2 of 50. As PO_2 continues to drop, tissue injury can be demonstrated with elevation of SGOT and other enzymes. Finally, a PO_2 of 20 is incompatible with life. It should be remembered that these are only guides—a normal person rendered acutely hypoxic may die with a PO_2 of 40. Conversely, a chronically hypoxemic patient might be fairly comfortable at the same PO_2 .

TREATMENT OF HYPOXEMIA

The treatment of hypoxemia is rather easy. It simply involves increasing the oxygen concentration the patient is breathing. Though there are many methods of administering the oxygen, the one most commonly available to most hospitals and physicians is the nasal cannula. Heated nebulizers furnishing 40 per cent oxygen concentration are also quite effective. Oxygen tents, for the most part, have no place in this condition, for it rather effectively isolates the patient which hinders effective respiratory care. Several principles should be emphasized. In the usual patient in respiratory insufficiency, only very small increases in the oxygen concentration are necessary. Usually oxygen at a rate of 2-3 liters per minute is entirely sufficient to prevent hypoxemia. Secondly, if a patient is hypoxemic, he requires oxygen continuously. This includes periods of eating, bathing, exercise and bathroom privileges. A third principle which should be emphasized is the hazard of using too high a concentration of oxygen. If a patient is in severe distress and is breathing from a hypoxic drive, then use of too high concentrations of oxygen may lead to further respiratory depression.

ELIMINATION OF CO_2

The elimination of CO_2 from the body is the second function of the lungs. The body is almost completely dependent on the lungs to carry out this function. As the result of aerobic metabolism, the body produces approximately 100 cc. of CO_2 per square meter of body surface area which amounts to about 200 cc. in a 70 kilogram man per minute. The body is dependent on alveolar ventilation to eliminate the CO_2 : alveolar ventilation = $\frac{\text{produced} \times .863 \text{ } CO_2}{PCO_2}$. If alveolar ventilation is decreased, then the body levels or partial pressure of CO_2 increases. Therefore, the PCO_2

in arterial blood is a function of alveolar ventilation. The PCO_2 is directly proportional to the carbonic acid in the blood, and therefore, any rise in PCO_2 produces a rise in carbonic acid which therefore increases the hydrogen ion concentration causing an acidosis.

This is related through the Henderson-Hasselbalch Equation: $\text{H}^+(\text{aonomoles}) = 24 \frac{\text{PCO}_2 (\text{mm Hg.})}{\text{HCO}_3 (\text{meq})}$ Though this does not look like the familiar Henderson-Hasselbalch equation, it is another way of writing the equation. In looking at this it can be seen that an increase of the PCO_2 on the right side increases the hydrogen concentration. If the PCO_2 rises due to inefficient alveolar ventilation, then the patient will immediately develop a respiratory acidosis. The bicarbonate as depicted in the formula is a function of the kidneys. If the PCO_2 rises, then the kidneys function to increase the bicarbonate in an effort to compensate for the acidosis and return the hydrogen ion concentration or pH toward a more normal figure. The dynamics of the system are important. If respiration is cut in half, there is an immediate and sustained rise in minutes of the PCO_2 . However, the kidney functions in a period of hours to days rather than minutes, and therefore, compensation always lags in insufficient breathing.

CO₂ RETENTION

The clinical diagnosis of CO_2 retention is difficult with many non-specific symptoms and signs. When significant CO_2 levels develop, the patient becomes increasingly drowsy, and as the PCO_2 approaches 90, the patient will progress into a coma. Asterixis or a flapping tremor is not peculiar to liver disease alone. A rather typical flap may be seen in a patient in respiratory failure. In the late stages of CO_2 retention, papilledema may be produced due to increased cerebral vasodilatation with increased blood flood. As in hypoxemia, the only true and accurate method of determining CO_2 states is the measurement of blood gas. Arterial blood is preferable, but venous blood may be sufficient in measuring the PCO_2 , unlike hypoxemia where arterial blood is mandatory.

There are several principles which should be mentioned. Any elevation of PCO_2 means the patient is hypo-ventilating. Secondly, any elevation of PCO_2 renders the patient hypoxemic. From the alveolar air equation: $\text{PAO}_2 = \text{FI}_{\text{O}_2} \text{P(B-H}_2\text{O)} - \text{PACO}_2 \times 1.2$, a PCO_2 at a normal level of 40 reduces the oxygen from 140 in room

air to approximately 90 in the arterial blood; on the other hand, if the PCO_2 is 80, the CO_2 displaces oxygen in the alveolar rendering the patient much more hypoxemic.

Though the treatment of hypoxemia is easy with the administration of oxygen, the treatment of excess CO_2 retention is a more difficult clinical problem. If the cause of the respiratory insufficiency is acute, such as trauma, then ventilatory assistance is mandatory. In the emergency room, this might be the Ambu bag or mouth to mouth breathing. In the operating room, this may be the anesthesia machine. The IPPB machines have enjoyed increasing popularity over the past several years. If the patient is alert and cooperative, perhaps a face mask or mouth piece will be sufficient, though one could use this only for limited periods of time.

TRACHEAL INTUBATION

If this should not prove an effective method, then tracheal intubation with an anesthesia type endotracheal tube would be in order. With proper care and due precautions, these tubes may be left in place for several days. As a general rule of thumb, if the tube is needed more than two days, conversion to a tracheostomy seems to be indicated; however, many cases have been treated with tubes for up to one week without undue problems. There are complications from the tubes, and these may present early or late. Finally, the tracheostomy may be indicated, and it is well recognized that these are not without complications also.

PRINCIPLES OF MANAGEMENT

In the more chronic problems such as emphysema, where the lungs are diseased, it may not be possible to return the patient to a normal blood gas state. Principles of management are slightly different. The first principle is to clean the tracheo-bronchial tree. If the patient is awake and coughing, then full advantage is taken of this. If he is too weak to cough, nasotracheal suction may well be lifesaving. Various stimulants including ethamivan or dextroamphetamine may increase his level of consciousness, and therefore improve his ventilatory effort. Various physical therapy maneuvers also assist in more effective ventilation and drainage of the tracheo-bronchial tree. Finally, if these methods

in the chronic patient are ineffective, supported respiration with the respirators may be necessary.

THE IPPB MACHINE

Since the mid-1950s, when the value of IPPB machines was first recognized during the polio epidemic in the Scandinavian countries, much improvement has occurred. The cost of the IPPB devices ranges from \$50 to \$5,000 depending on the qualities and sophistication desired. The two main functions served by the IPPB machine are: (1) providing a deep breath and (2) providing a vehicle for medication. Though it is not the purpose of this paper to discuss these machines, certain principles should be mentioned.

The pressure necessary to ventilate a patient in various conditions differs. A pressure of 15 cm. H₂O may be adequate for the obstructed patient with big overdistended lungs. On the other hand, the "stiff lung" as seen in pulmonary edema, pulmonary fibrosis, and other conditions may require pressures of 30-50 cm. H₂O, and occasionally pressure of 120 cm. H₂O, may be necessary.

Secondly, despite the manufacturers' claim of

delivering a 40 per cent O₂ concentration, this is not so, except on the newer and more expensive machines. The average O₂ concentration delivered is between 50-60 per cent; so this, in effect, is uncontrolled O₂. Compressed air rather than O₂ is adequate in most cases. Some type of moisture is necessary to keep from drying the tracheo-bronchial tree. A side arm medication nebulizer is completely insufficient. A main stream nebulizer or humidifier is most desirable.

Infection is increasingly recognized as a problem. Gram negative organisms have been found as a cause of a necrotizing pneumonitis. The source of infection, in most cases, is in the main stream nebulizers. Careful monitoring at regular intervals is essential in insuring the machines are free of bacterial contamination.

SUMMARY

In summary, many important and improved changes in the respiratory insufficiency problem have come about in the past several years. All of these changes are based on improved understanding of the pathophysiology of the problem. If these pathophysiology changes are understood, then a more rational approach to therapy is possible. ★★★

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RESTFUL REST ROOM

Stopping at a rural service station, the motorist asked, "Do you have a rest room?"

"Nope," said the attendant. "When any of us git tired we jes sit on one of them oil drums."

Cancer Quiz

Cancer Committee
University Medical Center
Jackson, Mississippi

THIS FEATURE, consisting of review questions related to the cancer field, was prepared by the Cancer Committee of the University Medical Center. Answers appear on a separate page.

Questions from readers related to these review questions may be submitted to the Editors of the JOURNAL for forwarding to the committee. Each will receive a personal reply. Suitable questions from readers will be considered for publication. This initial presentation relates to general cancer statistics, based on data published by the American Cancer Society.

Comment and suggestions are invited from readers.—*The Editors.*

- 1) In the United States, cancer deaths represent approximately what per cent of total deaths:
 - a) 5%
 - b) 15%
 - c) 25%
 - d) 35%
- 2) These cancer deaths represent a total number in the range of:
 - a) 100,000
 - b) 300,000
 - c) 500,000
 - d) 700,000
- 3) The annual U. S. death total, if expressed in deaths per unit of time, would be:
 - a) One death per 1 minute
 - b) One death per 2 minutes
 - c) One death per 5 minutes
 - d) One death per 10 minutes
- 4) The mortality rate, male to female is:
 - a) 50% men/50% women
 - b) 45% men/55% women
 - c) 45% men/45% women
 - d) 60% men/40% women
- 5) The two leading causes of cancer deaths in the U. S. A. are:
 - a) breast cancer
 - b) cervix cancer
 - c) lung cancer
 - d) rectal-colon cancer
- 6) The two leading causes of cancer deaths among American men are:
 - a) lung cancer
 - b) rectal-colon cancer
 - c) Hodgkin's disease
 - d) stomach cancer
- 7) The leading two causes of cancer deaths among American women are:
 - a) lung cancer
 - b) breast cancer
 - c) cervix cancer
 - d) rectal-colon cancer
- 8) Incidence data shows the most common cancer is:
 - a) lung cancer
 - b) breast cancer
 - c) cervix cancer
 - d) skin cancer
- 9) Approximate annual total cancer deaths in Mississippi is:
 - a) 1,000 per year
 - b) 2,000 per year
 - c) 3,000 per year
 - d) 4,000 per year
- 10) If your patient community consists of 5,000 people, the approximate number that will be under cancer care during the next year is:
 - a) 10
 - b) 20
 - c) 30
 - d) 50

(Answers on page 49)

Radiologic Seminar XCI: Tracheoesophageal Fistula

WALTER T. COLBERT
Natchez, Mississippi

TRACHEOESOPHAGEAL FISTULA (TEF) occurs once in 3000 births, and in over 95 per cent of instances is associated with atresia of the esophagus. This anomaly is one of the most frequent congenital defects, which, if left untreated, will be uniformly fatal in the neonatal period.

There are two conditions which may herald the birth of a child with esophageal atresia and tracheoesophageal fistula-polyhydramnios and prematurity. Commonly associated anomalies that should be recognized at birth are congenital heart defects, imperforate anus, arm and hand anomalies, and clefts of the lip and palate. In babies born of mothers with polyhydramnios a routine part of the neonatal examination must include the passage of a nasogastric tube and verification of its presence in the stomach by x-ray. The same procedure should be followed in the routine examination of premature babies or those born with any of the above mentioned malformations.

In a majority of infants with esophageal atresia and TEF anomalies the diagnosis will be suggested by the following signs. Apparently excessive mucus will usually be the first clinical sign, as all of the mucus must be regurgitated in instances of esophageal atresia. These infants will

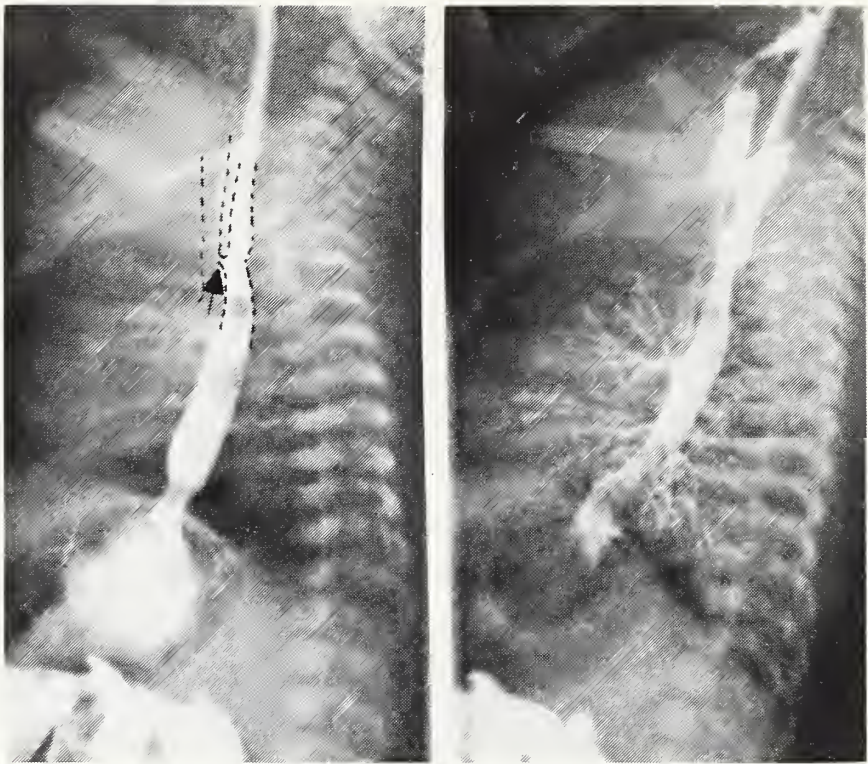
also cough, choke, and may become cyanotic when fed. These findings will frequently be noticed by personnel in the nursery. It is important that the diagnosis be made promptly, as the prevention of pneumonitis by appropriate therapy is mandatory if these infants are to be salvaged.

The diagnosis can be established definitely by failure of passage of a radiopaque catheter into the stomach. If the tube cannot be passed into the stomach and verified as to position by radiologic means, a small amount of opaque material can be introduced into the catheter and the site of esophageal atresia will be demonstrated. In those instances where there is no associated esophageal atresia—a relatively small percentage—the diagnosis will depend upon actual contrast filling of the communication between the esophagus and trachea. This can be accomplished by the injection of opaque material through a catheter in the upper esophagus, with care being taken to avoid spillage of the opaque material over the epiglottis.

CASE I—This two day old male infant was noted by the nursery personnel to cough, choke and become cyanotic whenever feeding was attempted. TEF was suspected clinically, and a catheter was passed easily into the stomach excluding the presence of esophageal atresia. Opaque material (micropaque) was then introduced through an esophageal catheter, and a direct communication between the upper esophagus and trachea was demonstrated. The patient was

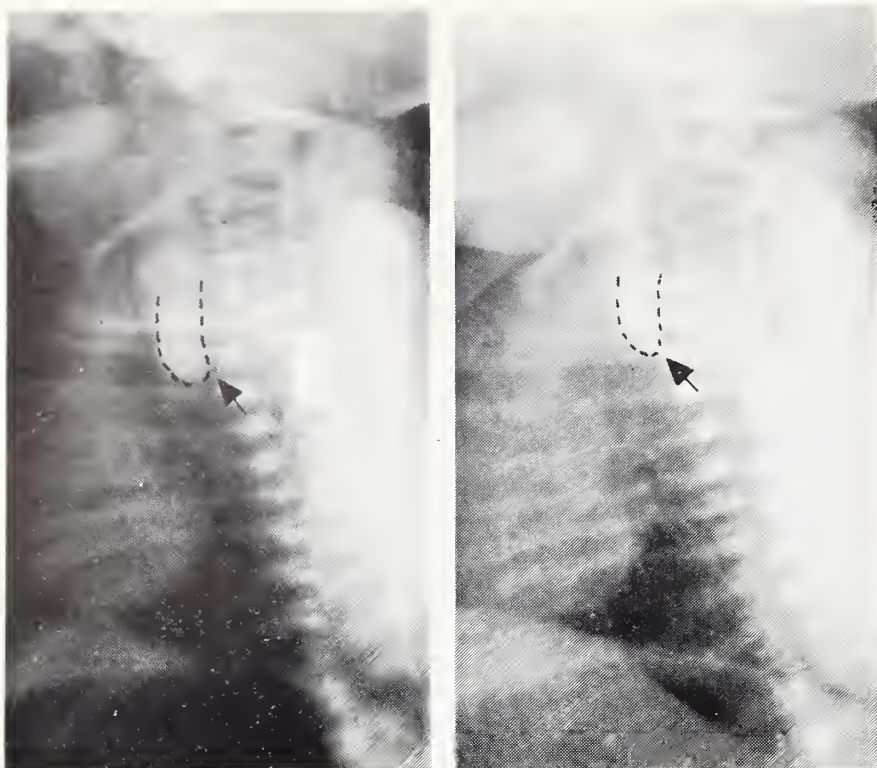
Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Natchez General Hospital.

Case I—Figure 1. Oblique views of the bariun-filled esophagus demonstrate beginiung, and subsequent euthusiastic filling of the tracheobronchial tree through the tracheo-esopha-geal communication (arrow). Opaque material was iutroduced into the esophagus using a balloon catheter in order to prevent aspiration of opaque material over the epiglottis.

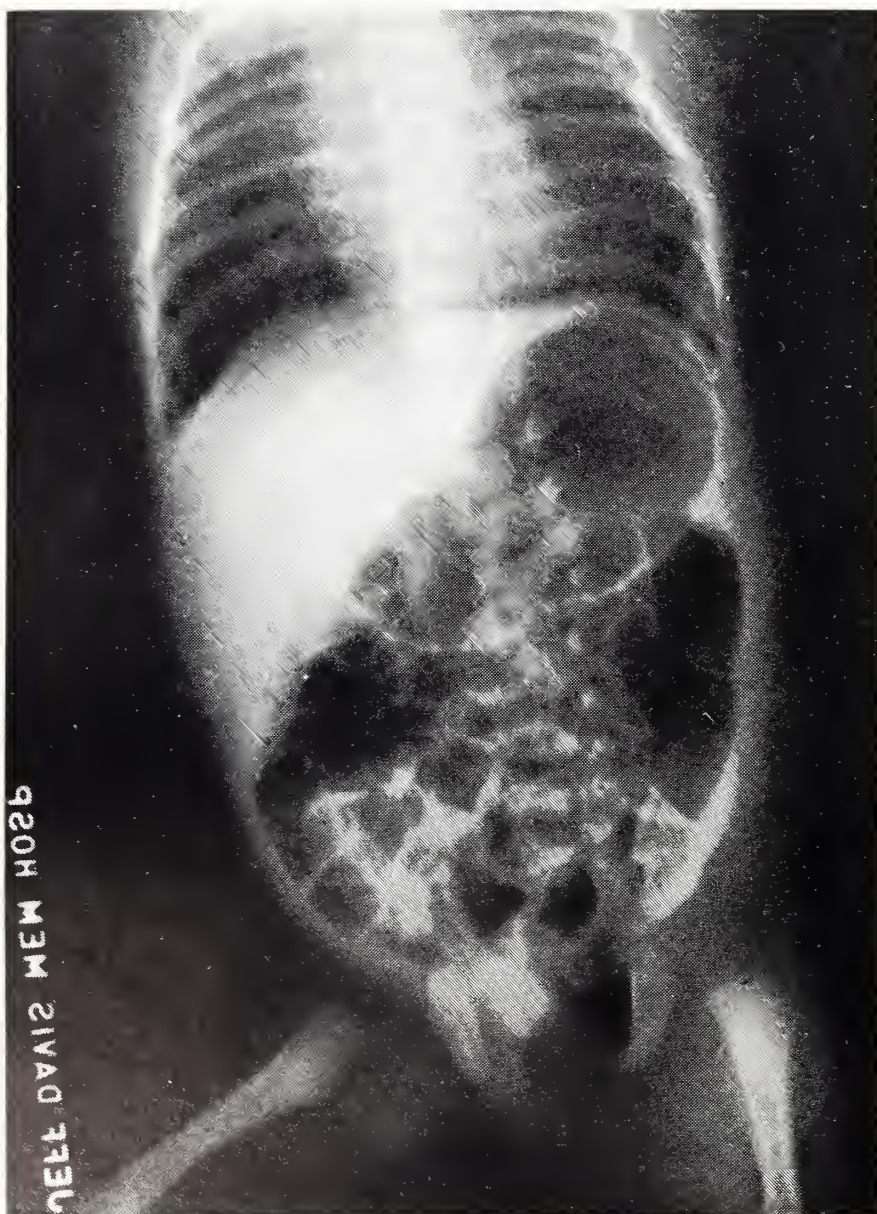


Case I—Figure 2. Chest film made immediately following the fluoroscopic procedure: an unintended, but normal bronchogram is noted. The lung fields were grossly clear in approximately 72 hours.





Case II—Figure 1. Oblique views of the chest with contrast material in the esophagus demonstrate a blind pouch, with no communication with the tracheobronchial tree. The patient did not aspirate any of the opaque material over the epiglottis.



Case II—Figure 2. A routine chest and abdomen film demonstrate relative over-expansion of the lung fields, and considerable gas throughout the gastrointestinal tract. This finding indicated a definite communication between the tracheobronchial tree and GI tract below the site of obstruction demonstrated on the contrast study.

treated surgically, with primary closure of the fistulous communication. This type of tracheoesophageal fistula comprises only 4 per cent of the TEF anomalies.

CASE II—This new born female infant was noted to have “excessive mucus” immediately after birth. It was not possible to pass a catheter into the stomach, and opaque material introduced into the pharynx demonstrated a blind pharyngo-esophageal pouch, with no communication between the atretic esophagus and the tracheobronchial tree. A film of the chest and abdomen, however, demonstrated over-expansion of the lung fields, and considerable gas throughout the entire GI tract. This finding indicated a definite communication of the GI tract with the tracheobronchial tree distally. These findings were verified at the subsequent surgical procedure. This type of tracheoesophageal fistula comprises approximately 87 per cent of the TEF anomalies.

The two cases noted above are fairly typical examples of the TEF anomalies that present themselves in the immediate neonatal period, and which can be diagnosed promptly by roentgenologic means.

SUMMARY

Tracheoesophageal fistula and esophageal atresia are neonatal emergencies which can be diagnosed promptly by roentgenologic means. While uncommon in occurrence, prompt recognition is necessary for survival of these infants. Pneumonitis remains the usual cause of a fatal outcome in these anomalies, but this complication can be prevented by prompt recognition of the fistula and appropriate treatment. ★★★

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PROFESSIONAL GRATUITY

Called by his draft board, a young man was examined by his family doctor who happened to be on the board. He passed easily and was inducted, which burned him up.

Next day he phoned the doctor and said, “You’re one heck of a doctor. It’s funny you always found something wrong with me when I was paying to visit you!”



The President Speaking

‘Needed Now’

JAMES L. ROYALS, M.D.

Jackson, Mississippi

THE FIRST THREE days in December the AMA held its annual clinical convention in Denver. In addition to your delegates, several of your officers attended. On Saturday, preceding the regular meeting, there was an all day conference on peer review. This was a most enlightening conference, which revealed to us that problems physicians face are more or less the same throughout our nation.

The afternoon part of this meeting was composed of two demonstrations by peer review committees, one a committee from a hospital staff as it functioned in reviewing the in-hospital activities of its staff members and the other a peer review committee from a county medical society as it dealt with problems relating to a broader aspect of our health care system. These interesting demonstrations revealed the degree to which organized medicine in other areas of the country are dealing with pressing and sometimes painful problems within its own ranks.

It is essential, if medicine hopes to continue as a free enterprise, to improve its own peer review so as to assure a continuing up-grading of quality medical service. I find that Mississippi is behind the other states in the application of peer review and urge that medical staffs and component medical societies move rapidly ahead in this urgently needed area of self-analysis. ★★★



Medicaid in Mississippi: A Bare Bones Beginning

I

THE FIRST DAY of 1970 will be more remarkable for eight hours of bowl games on television, family gatherings, and a few headaches from the festivities of New Year's Eve than for the inception of the \$33.7 million Medicaid program in Mississippi. For all intent and purpose, the date is so much statutory rhetoric, because the program will not be fully operational before spring or perhaps summer. It is a bare bones beginning.

The Mississippi Medical Assistance Act of 1969, House Bill 2 of the Extraordinary Session of the Legislature, is the legal mouthful for Medicaid. Its birth pains were harsh as the so-lons debated with spirit—and sometimes acrimony—from July 22 through Oct. 11. It exists only because of administration leadership, an understanding of what had to be done by a majority of legislators, and the support of the health care team.

It is a complicated law which implements the most complex health care program ever devised by the Congress. The proof of this pudding shows up in the misunderstanding about it during debate in the Legislature. And beyond this,

there were out-and-out hostile efforts openly exerted to cloud the issues and defeat the bill. But this is mostly in the past tense, as the mechanism of state government has meshed in heroic effort to get the program off the ground in a matter of two and one-half months. Almost any workable result has got to go down in the history books as a compliment to the John Bell Williams administration and the newly created Mississippi Medicaid Commission.

The program director, Dr. Alton B. Cobb of Jackson, has assembled the nucleus of a competent staff, initiated communications and working agreements with providers, coordinated with other state agencies, and begun the task of building the substantial fiscal machine necessary to make as many as 2 million payments per year.

II

For a minimum of three months, only six services will be activated:

- Inpatient hospital services.
- Outpatient hospital services.
- Other laboratory and x-ray services.
- Skilled nursing home services.
- Physicians' services.

EDITORIALS / Continued

—Periodic screening and diagnostic services.

Seven other categories of services under the program are, for the moment, deferred because of time demands in solving staggering implementation problems. These are home health services for beneficiaries eligible for skilled nursing home services, emergency ambulance service ordered by a physician or law enforcement officer, legend drugs and insulin, sharply limited dental services, eyeglasses following eye surgery, inpatient hospital services for those over age 65 in an institution for tuberculosis or mental disease, and care and services provided in Christian Science sanatoria.

In scope, amount, and duration, services are generally limited by frequency of utilization, except for physicians' services which are additionally limited by dollar amounts. Inpatient hospital care is provided for 20 days per fiscal year with an additional 20 days available on review, recertification, and approval by the utilization review mechanism. Outpatient hospital care is limited to 30 visits per fiscal year.

Stays in nursing homes beyond 90 days must pass review criteria, and while specific limitations on laboratory and x-ray services are not mentioned, the labs must be certified under Title XVIII (Medicare).

III

Physicians will be compensated for services rendered in the hospital, nursing home, office, patient's home, or elsewhere. Ordinarily, hospital visits are limited to one per day, and the program will pay for a maximum of 36 nursing home visits per year.

Limitations on home and office visits are not mentioned, but the Medicaid Commission has plans for closely supervised utilization review. Diagnostic laboratory services performed in the physician's office are limited to hematocrit, hemoglobin, routine urinalysis, and WBC.

The Medicaid law prescribes payment for physicians under the Mississippi Blue Shield F-300 fee schedule, and it is neither complete nor relative. Generally, the schedule provides payment around the 50th to as much as the 60th percentiles. For the many procedures not covered by the F-300, the California Relative Value Index of 1964 will be used with a \$4 per point conversion coefficient. In some instances, this will permit professional compensation at as much as the 70th percentile.

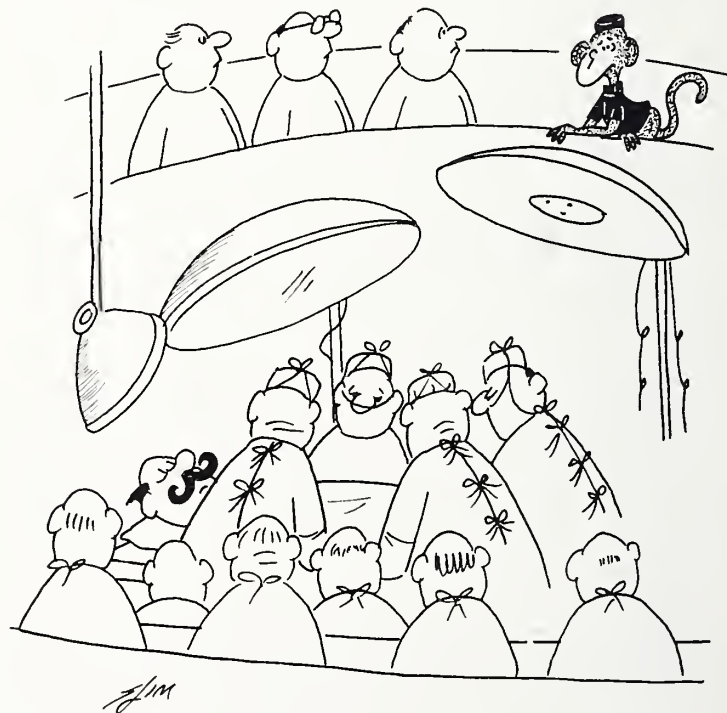
By anybody's measurement, these are sub-

standard fees, and this has been the pattern for Medicaid nationally in 1969 following the HEW-imposed fee freeze. Participation is voluntary, of course, and those participating *should charge their usual and customary fees exactly as charged to private patients*, regardless of what they receive in payment.

Charges at the usual and customary level are crucially important if we are to avoid a distorted profile of fee patterns prevailing in Mississippi. For many years, some physicians charged only what low option care financing plans would pay on the shaky assumption that they were expediting payment of what they would get anyway. This practice actually worked against the physician in the matter of his receiving fair professional compensation, because there was simply nothing on the books to prove that the real charges were greater than the parsimonious allowances of the financing mechanism.

IV

It is fair to say that Medicaid in Mississippi is in a probationary period as it moves onto the scene to finance health care for about 9 per cent of the state's population. For such a massive task, it is indeed a bare bones program. To make it a viable mechanism as visualized by the association's House of Delegates in approving it on two occasions will demand patience, leadership, and not a little sympathetic understanding.



The physician is not being fully compensated for his services under the program—not nationally nor in Mississippi. Through June 30, 1969, total payments to physicians under all Medicaid programs then operational amounted to 11 per cent of all combined state and federal funds expended, while 89 per cent had been paid to hospitals, nursing homes, pharmacists, and all other care sources. Two principal and opposite arguments about professional compensation have been noted in Mississippi:

—When the state buys a tire for a state-owned vehicle, it pays the price of a tire. When a shovel is purchased for the Forestry Commission, the state pays out the price of a shovel. Hence, when the state purchases an appendectomy, it should pay the going price.

—Since 1936 when the State Hospital Commission program was enacted, physicians have received nothing for their services to the indigent in Mississippi and were, in fact, forbidden to charge, accept payment, or in any manner be compensated. Under Medicaid, at least a beginning has been made with half a fee or a little more.

The association has spoken frankly in this connection: Physicians should be compensated for services actually rendered with payment of true usual and customary fees. This will be a goal in any program—not just Medicaid—which falls short. But it does not mean that Medicaid will be ignored or that the association's increasing effectiveness in peer review will be denied the program. Nor does this infer that support is grudgingly given, because the word of the House of Delegates is the association's pledge and bond. The practicing physician asks only that a fair shake be afforded him, and he will carry out his dedication in partnership with his state.—R.B.K.

The Old Chit-Chat Gets a Facelifting

The state medical association's oldest existing and continuing publication, the *Newsletter*, has turned up with its third facelifting. Beginning with this issue of the JOURNAL, the *Newsletter* goes to a three-page format as more or less the first and last words in each issue. The third page, entitled "In Conclusion," will be the last page in each issue.

Newsletter is 19 years old, having made its initial appearance as a single mimeographed page in 1951 which was published twice monthly. A year later, it showed up as a four-page monthly publication sent to every member and continued uninterrupted until December 1959. When the first issue of the JOURNAL was published in January 1960, *Newsletter* appeared as a two-page bound insert in the front of the book.

After 10 years, the chatty sheet becomes an integral part of the JOURNAL on three printed pages. The Editors and Committee on Publications feel that the new format will give more flexibility, increase readership, and assist in production. The insert was printed at Jackson and shipped to the JOURNAL printers, sometimes with teeth-gnashing results. For example, *Newsletter* was missent by the post office to the wrong city twice in 1969 and completely lost once somewhere in that rain, snow, sleet, and gloom of night through which the U. S. mail must traverse.

As with each and every feature, article, and regular department in the JOURNAL, the *Newsletter* belongs to the membership. Suggestions, criticism, and comment are invited on the new format. As for the retiring two-pager, appreciation is expressed for letters, calls, and comment—both kinds—over the past decade.—R.B.K.

Mandatory Licensure For Mississippi Nurses

The state medical association has a new policy on licensure of nurses, a carefully developed course of action which is the product of open debate, serious study, and multi-level review and approval by constitutional bodies.

Subject to the actual bill introduced in the 1970 Regular Session of the Legislature as to form and content, the association approves mandatory licensure of nurses in Mississippi.

At the 101st Annual Session in May 1969, the House heard sincere pro and con debate on this issue. Recognizing it as a matter requiring further study and mature consideration, the House recommitted the issue to the Council on Medical Service. The council, in turn, met and reviewed the matter, assigning it to the Committee on Nursing, one of the council's committees devoted to one of its many specialized fields.

The committee made studies, met with representatives of the nurses association, took the pulse of hospitals, and considered views of physicians. Through these deliberations, the new policy was carefully shaped with virtually no ramification neglected in the process.

The committee first looked at licensure for all health care and health-related professions. Generally, such licensure is a function of the states and has these characteristics:

—It is issued to an individual rather than to a company, corporation, or impersonal entity.

—It authorizes the individual so licensed to engage in a profession or occupation, usually employing a special or distinctive identifying title.

—It is granted on one or more of the following conditions: Education or training minimums, apprenticeship or practice, proficiency or knowledge, good character, honorable intent, and attainment of a stated age.

Licensure of an occupation or profession is either mandatory or permissive. Of 13 health care and health-related professions and occupations licensed in Mississippi, nine are mandatory (as in the case of physicians and dentists), while four are permissive. Mandatory licensure requires that the individual practicing the profession or engaging in the occupation be licensed and prohibits all others from doing so. Permissive licensure permits only those licensed to use a particular title or designation relating to the profession or occupation, but others are not prohibited from working in the field as long as they do not use the protected title or designation.

Nurses have mandatory licensure in 42 state jurisdictions for the R.N. and permissive licensure in nine, including Mississippi.

Mississippi nurses have long sought mandatory licensure. Such a law was enacted in 1958 but vetoed by the then-Governor because of the composition of the examining board and not, according to the association's understanding, because of the mandatory aspects. Arguments over the issue have nearly always centered on the crucial matter of whether such a law would exacerbate the already serious shortage of nurses in the state.

The draft bill which was examined by the association's official bodies exempts from licensure "any person functioning under proper supervision as nursing aids, attendants, orderlies, and other auxiliary workers in private homes, offices, hospitals, nursing or rest homes, or institutions."

The draft also omits the two physician-members from the Board of Nurse Examiners. The proposed board would consist of five R.N.'s and two L.P.N.'s, and the latter would not be permitted a vote except on matters relating to licensed practical nurses. The policy of the medical association expresses serious reservations over the composition of the proposed board "not necessarily related to the physician-members." The policy expresses concern for a "balance in the exercise of this power by inclusion of health team representatives other than nurses as full voting members."

But in giving approval to the principle of mandatory licensure for nurses, the policy has been carefully reviewed by a committee, an elected council, and the Board of Trustees. It is an expression of concern and good faith by the physicians of Mississippi who have reserved the right to speak up in the forging of any law which may be enacted.—R.B.K.

Jackson Chamber Honors Health Care Team

A very special year-end occasion honored medicine in Mississippi as the Jackson Chamber of Commerce made health care and care providers the theme of its 1969 membership meeting. Although the Jackson Chamber is typical in being oriented toward business and indus-



"Sorry we can't discharge you from the hospital today, Mr. Wilkins . . . it's far too windy outside."

try, the capital city organization has strong medical orientation, too.

The 3,000-plus member group has long recognized that Jackson is a primary medical center and has given strong support to development of medical facilities in the capital. The chamber points out with pride that medical care is the second biggest "industry" in the city, second only to state government in total employment. An estimated 8,000 individuals are involved full time in health services and supportive work.

The membership meeting, attended by 800 at a gala banquet, singled out for recognition physicians, dentists, hospitals, nursing homes, pharmacists, and health services supply sources. One hundred twenty-five Jackson physicians are on the active membership rolls of the chamber which also boasts 33 dentists. Well represented also are leaders from hospitals, nursing homes, wholesale and retail drug firms, medical supply sources, and dental laboratories.

Although the state feels the pinch of health service personnel shortages, it benefits from a continuing maximum effort by its health care team. In turn, these providers of services are grateful for recognition by civic leadership. Each needs the other in working for a better state.
—R.B.K.

Our Environment Is at Stake

If the fight against pollution is lost, then we also lose the productive environment in a nation of plenty. And the latest word is that we are losing the fight.

The Comptroller General of the United States, Elmer B. Staats, has reported to the Congress that \$5.4 billion—that's \$1.2 billion federal dollars and a hefty \$4.2 billion from the states—spent on water pollution control has been largely dissolved into the effluent and wastes that fill our rivers, streams, and land-locked bodies of water.

Mr. Staats says that some good has come of the monumental effort, but pollution has increased in spite of the expenditures. As waste control projects are completed, more sources of pollution crop up. In the 13 years of the life of the Federal Water Pollution Control Administration, the tonnage of waste discharge into rivers and streams has actually increased. Worse yet are the inadequate treatment systems which may mask the problem.

The Comptroller General believes that present programs are little more than a shotgun approach, and he hints that some funds have been dumped into the pork barrel rather than the sewage lagoon. There is also an overtone of inadequate state law and enforcement against municipal and industrial pollution sources.

Mississippi was late coming into the program, and we have a commission which is less than two years old. But the important thing is that something is being done about a serious health and environmental safety problem. It's not a matter of shackling industry or of making production uneconomical. Industry can no more survive in a polluted environment than can its workers and consumers of its products.

While Mr. Staats was addressing himself to the economic aspects of the problem which is his job in reporting to the Congress, he demonstrated clearly that he understands the health aspects of it, too. With stern realism, the report recommends that no federal money be plunked down for antipollution projects until their effectiveness is assured.

All of this means that the task of creating a safer environment is everybody's job under well-enforced laws. Pollution is a health problem of undefined dimensions, but we can easily see that it is massive enough to threaten our very existence. We'd better do something about it—and soon.
—R.B.K.



January 19-23

CANCER CHEMOTHERAPY INTENSIVE COURSE

University Medical Center, Jackson
January 19, 20, 21, 22, 23, 1970, beginning
at 8 a.m.

Sponsored by The University of Mississippi
School of Medicine, with the support of the
Mississippi Regional Medical Program

Participants:

Warren N. Bell, M.D., professor of clinical laboratory sciences and chairman of the department and associate professor of medicine, The University of Mississippi School of Medicine
G. D. Deraps, M.D., instructor in medicine, The University of Mississippi School of Medicine

POSTGRADUATE / Continued

This one-week intensive course will combine lectures, group discussions, case presentations and actual clinical evaluation and management of patients with the most common malignancies. Course content will include methods for office screening, tumor staging, natural history of disease, indications and treatment of various malignancies with chemotherapy and radiotherapy.

February 9-13

RADIOLOGY INTENSIVE COURSE

University Medical Center, Jackson

February 9, 10, 11, 12, 13, 1970, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Participant:

Robert D. Sloan, M.D., professor of radiology and chairman of the department, The University of Mississippi School of Medicine

The one-week intensive course will include practical observations of radiologic procedures in the diagnostic, therapeutic, and isotope areas, as well as sessions dealing with equipment, techniques, artefacts, and radiation safety. Registrants will participate in numerous diagnostic conferences demonstrating practical points of radiographic interpretation, stressing both the value and limitations of clinical radiology.

Registration in both intensive courses is limited to five physicians from the class of 20 enrolled in the Mississippi Postgraduate Institute in the Medical Sciences, a Mississippi Regional Medical Program-supported project designed by the University of Mississippi Medical Center and the Mississippi State Medical Association.

CIRCUIT COURSES

SOUTHWESTERN CIRCUIT

McCOMB—January 6—Session 2, Southwest Mississippi General Hospital, 7 p.m.

Session 2—Hyperthyroidism

Medical Management, Dr. Herbert Langford

Surgical Management, Dr. Harvey Johnston

SOUTHERN CIRCUIT

BILOXI—January 7—Session 1, Howard Memorial Hospital, 6:30 p.m.

GULFPORT—February 4—Session 2, Gulfport Memorial Hospital, 6:30 p.m.

HATTIESBURG—January 8—Session 1; February 5—Session 2, Forrest General Hospital, 6:30 p.m.

Session 1—Diagnosis and Management of Anemia

In Adults, Dr. Guy Gillespie

In Children, Dr. Robert E. Carter

Session 2—Diagnosis and Management of Malignant Skin Lesions

Dermatologic Approach, Dr. James G. Thompson

Surgical Approach, Dr. J. Manning Hudson

EASTERN CIRCUIT

COLUMBUS—January 27—Session 1, Lowndes County General Hospital, 6:30 p.m.

Session 1—Carcinoma of the Cervix

Radiologic Approach, Dr. Bernard Hickman

Surgical Approach, Dr. Richard Boronow

FUTURE CALENDAR

January 6, 1970

CIRCUIT COURSE, McCOMB

January 7

CIRCUIT COURSE, BILOXI

January 8

CIRCUIT COURSE, HATTIESBURG

January 19-23

CANCER CHEMOTHERAPY INTENSIVE COURSE

January 27

CIRCUIT COURSE, COLUMBUS

February 4

CIRCUIT COURSE, BILOXI

February 5

CIRCUIT COURSE, HATTIESBURG

February 9-13

RADIOLOGY INTENSIVE COURSE

February 11

SEMINAR ON BACK PAIN

February 17

CIRCUIT COURSE, NATCHEZ

February 24

CIRCUIT COURSE, COLUMBUS

March 2-6

RENAL DISEASE INTENSIVE COURSE

March 4

CIRCUIT COURSE, BILOXI

March 6

RENAL DISEASE SEMINAR

March 12

CIRCUIT COURSE, HATTIESBURG

March 16-20

CARDIOLOGY INTENSIVE COURSE
STROKE INTENSIVE COURSE

April 1-3

CARDIOVASCULAR SEMINAR

April 7

CIRCUIT COURSE, McCOMB

April 16

MISSISSIPPI THORACIC SOCIETY, JACKSON

April 21

CIRCUIT COURSE, COLUMBUS

May 11-14

MISSISSIPPI STATE MEDICAL ASSOCIATION

RMP Awards Cardiopulmonary Grant

The Mississippi Regional Medical Program has awarded a nine-month grant of \$38,988 to the Mississippi Heart Association for a cardiopulmonary resuscitation project.

Aimed at training members of the health team in approved techniques of cardiopulmonary resuscitation, the program also seeks to broaden the development of continuous inservice instruction programs in each regional hospital, nursing home and extended care facility.

Erratum

Through an inadvertent binding error, pages 547-550 were omitted from *some* copies of the December 1969 JOURNAL, Vol. X, No. 12. The missing pages are part of CPC XCV.

We apologize to our author, Dr. William B. Wilson of Jackson, and to our readers. Those having received copies with missing pages are requested to inform the Editors by postal card, and a complete reprint of the article will be returned—with an unused postal card.

Hill Crest HOSPITAL

(Formerly Hill Crest Sanitarium)

7000 5TH AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205-836-7201

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independent hospital for
intensive treatment of
nervous disorders . . .**

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 44 years of service.

Both male and female pa-

tients are accepted and departmentalized care is provided according to sex and the degree of illness.

In addition to the psychiatric staff, consultants are available in all medical specialties.



MEDICAL DIRECTOR:

James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:

James K. Ward, M.D., F.A.P.A.

Hardin M. Ritchey, M.D., F.A.P.A.

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AMERICAN HOSPITAL ASSOCIATION . . .
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ALABAMA HOSPITAL ASSOCIATION . . .
BIRMINGHAM REGIONAL HOSPITAL COUNCIL

Hill Crest is fully accredited by the Joint Commission on Accreditation of Hospitals and is also approved for Medicare patients.

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HOSPITAL**
BIRMINGHAM, ALABAMA



PERSONALS

BLAIR E. BATSON and JANICE REDD, both of Jackson and UMC, attended the fall meetings of the Southern Society for Pediatric Research in Richmond, Va.

G. LACEY BILES of Sumner spoke at a recent District Four Heart Association meeting in Clarksdale. Also speaking was WALTER TAYLOR of Clarksdale who talked on diet and heart disease.

ROBERT E. BLOUNT of Jackson and UMC met with the American Rheumatism Association in Tucson, Ariz. Dec. 5-6.

L. H. BOUNDS is serving his second term as president of the Meridian Symphony Society Board.

JOHN BOWER of Jackson and UMC recently spoke to the Corinth Chapter of the Kidney Foundation of Mississippi about kidney disease and the treatments including transplanting and the artificial kidney machine.

RALPH H. BROCK of McComb announces the removal of his office to 150 Marion Avenue.

RAYMOND W. BROWNING of Greenwood announces the removal of his office to his newly constructed clinic at 1317 River Road.

PAUL B. BRUMBY of Lexington recently addressed the annual convention of the Mississippi Federation of Licensed Practical Nurses, Inc. at the Hotel Heidelberg in Jackson.

Ten Jackson physicians were cited as health leaders by the Jackson Chamber of Commerce at its annual meeting in November. Those spotlighted in the "Salute to Health Care Facilities and People" were ROBERT CARTER, DAVID WILSON, JAMES L. ROYALS, WILLIAM O. BARNETT, JAMES HENDRICK, WILLIAM LOTTERHOS, ALTON COBB, W. L. JAQUITH, ERIC McVEY, and HUGH COTTRELL.

ROBERT E. CARTER, UMC dean and director, participated in a National Volunteer Leadership Conference of the National Foundation-March of Dimes in San Diego in December.

WALTER CRAWFORD of Tylertown spoke to the

Tylertown Rotary Club during National Family Health Week.

ROBERT L. DONALD of Pascagoula has been named State Chairman for Jaycee International Medical Supplies Program. The J.I.M.S. Program was conceived and initiated by Dr. Donald.

WILLIAM E. EGGERTON of Meridian announces the opening of his offices at 112-24th Avenue for the practice of dermatology.

IRA E. GADDY, JR. of Mississippi City has been appointed to the board of trustees of Memorial Hospital in Gulfport. Dr. Gaddy has the distinction of being the first physician appointed to the board of trustees.

R. F. GATES of Gulfport has assumed the presidency of the Coast Counties Medical Society. New president-elect is PAUL HORN of Biloxi and retiring president is A. K. MARTINOLICH of Bay St. Louis. E. T. RIEMANN, JR. of Gulfport was named vice president, and HAL CLEVELAND of Gulfport is secretary-treasurer.

HANNELORE H. GILES of Hattiesburg announces the opening of her office for the practice of cardiology at 990 Hardy Street.

RAYMOND F. GRENFELL and JAMES L. ROYALS of Jackson attended the AMA clinical meeting in Denver last month.

ARTHUR C. GUYTON, HARPER K. HELLEMS, HERBERT G. LANGFORD, RICHARD G. HUTCHINSON, GASTON RODRIGUEZ, and DAVID G. WATSON, all of Jackson and JOE M. ROSS of Vicksburg attended the American Heart Association scientific sessions and annual assembly in Dallas.

CARL HALE of Hattiesburg recently discussed radiological services at Forrest General Hospital at a Hub City Kiwanis Club meeting at the Red Carpet Inn.

G. SWINK HICKS of Natchez has been re-elected to serve a three year term on the Board of Trustees of the Mississippi Baptist Hospital.

GERALD HOPKINS of Oxford recently spoke to the District Six meeting of the Mississippi Heart Association in Grenada. He was introduced by GAINES L. COOK of Grenada, Medical Representative of Grenada County.

JERRY W. ILES of Natchez presented a biographical summary of Dr. John Wesley Monette, the first physician to become a member of the Mississippi Hall of Fame, at a recent meeting of



Achrocidin® Tablets and Syrup

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen Citrate 25 mg.

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Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons

on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculo-

popular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

PERSONALS / Continued

the Natchez Historical Society at Coyle House on Wall Street.

WILLIAM E. LOTTERHOS of Jackson addressed the North Jackson Kiwanis Club in observance of National Family Health Week. His topic was the family physician today. Dr. Lotterhos is president-elect of the American Academy of General Practice.

THOMAS STANLEY MARTIN of Hattiesburg has been elected to active membership in the American Academy of General Practice. Dr. Martin is director of student health services and the medical clinic at the University of Southern Mississippi.

ALBERT MEENA of Jackson has been elected as one of nine directors of the Better Business Bureau for a three year term.

SHELBY W. MITCHELL of Laurel is serving as acting health director of Harrison County. The post has been vacant since Hurricane Camille. Dr. Mitchell's regular assignment is health officer of Jones, Jasper, and Covington Counties.

STEVEN L. MOORE of Jackson has been appointed Mississippi's new comprehensive health planning director by Gov. John Bell Williams. Dr. Moore was formerly director of the division of local health services in the State Board of Health.

WILLIAM G. MUNN has moved into his new medical clinic at the corner of East Jackson Avenue and Oak Street in Mendenhall.

DUDLEY H. MUTZIGER of Natchez announces the removal of his offices from 729 North Pearl Street to the Medical Arts Building on Sgt. Prentiss Drive.

GLENN T. PEARSON of Hattiesburg has been elected secretary-treasurer of the Hattiesburg Area Chamber of Commerce.

CURTIS D. ROBERTS of Brandon has been elected vice-chief of the medical staff of Rankin General Hospital. ROLAND SAMSON was elected to a three-year term on the executive committee, and ROBERT RESTER was named to the hospital's active staff.

MAURICE TAQUINO of Biloxi was elected to the board of directors of Harrison County Private School Foundation at its annual meeting in Gulfport.

NORMAN W. TODD of Newton recently attended an Air Medical Examiner Flight Surgeon Seminar in Oklahoma City. Dr. Todd has been a sen-

ior medical examiner for all types of commercial and private pilots for 10 years.

RICHMOND SHARBROUGH of Vicksburg has been elected vice president of the newly organized Men's Golf Association of that city.

GUY T. VISE of Meridian is serving as chairman of the Operation Drug Alert committee of the Meridian Kiwanis Club. The program is designed to alert Meridian people to the dangers of drug abuse.

DAVID G. WATSON of Jackson participated in a symposium on the Natural History and Progress in Treatment of Congenital Heart Disease Dec. 3-7 in Toronto, Canada.

DAVID B. WILSON of Jackson and UMC attended the Washington, D. C. meeting for a Maryland-D. C.-Delaware Hospital last month.



DEATHS

ARMSTRONG, GEORGE GLAUCUS, SR., Houston. M.D., Memphis Hospital Medical College, Tenn., 1903; residency, Charity Hospital, Jackson, Sept. 1, 1918-Dec. 1, 1919; postgraduate work, Chicago EENT College, Illinois, 1920 and 1922; EENT Hospital, New Orleans, La., 1925 and 1927; member MSMA Fifty Year Club; Emeritus member MSMA and AMA; died Nov. 17, 1969, age 90.

OTKEN, LUTHER B., SR., Greenwood. M.D., University of Texas Medical Branch, Galveston, 1917; interned Manhattan Maternity Hospital, New York City, N. Y., one year; died Nov. 25, 1969, age 80.

RANEY, DANIEL H., Mattson. M.D., University of Texas Medical Branch, Galveston, 1917; interned St. Louis City Hospital, 3 months; scholarship Edinburgh, Scotland, 1919; member MSMA Fifty Year Club; Emeritus member MSMA and AMA; died Nov. 27, 1969, age 82.



NEW MEMBERS

No reports of election of new members in the association were reported to the JOURNAL during December 1969.



Book Reviews

Genetics and Counseling in Medical Practice. By Leonard E. Reisman, M.D. and Adam P. Matheny, Jr., Ph.D. 215 pages with illustrations. St. Louis: The C. V. Mosby Co., 1969. \$12.75

This small volume provides a good overall view of genetic counseling aimed at the medical practitioner. It is easy to read, and well worth reading for anyone called on to provide counseling for genetic disorders. Its greatest value is as a volume to read through for "the big picture" since it is not an exhaustive reference text. It nevertheless presents adequately the fundamentals of the major areas of medical genetics including probabilities, Mendelian principles, chromosome abnormalities and inborn errors.

Chapters on the general approach to genetic counseling, genetics and cancer, and mental retardation are particularly commendable. These chapters answer frequently-recurring questions directed by the medical practitioner to the genetic counselor. The authors have obviously drawn a great deal of the material from their own experiences in the sections on chromosome abnormalities and their clinical photographs are very good.

Diagrammatic illustrations explaining inheritance patterns are lacking, and the explanations in text, though adequate, may thus be hard to find for quick review by a busy practitioner. The authors have perpetuated the inadequate nationwide list of service facilities for genetic counseling which would be better omitted in favor of a reference to the International Directory of Genetic Services edited by Bergsma and Lynch and published by the National Foundation.

JOHN F. JACKSON, M.D.

Symposium on Sports Medicine. By the American Academy of Orthopaedic Surgeons. 210 pages with 199 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$15.00.

In 1962 the Executive Committee of the American Academy of Orthopaedic Surgeons established a Committee on Sports Medicine up-

on the recommendation of President-Elect Dr. Clinton Compere. This Committee was charged with many approaches to improving the medical care, and particularly the orthopaedic care of American youth engaged in athletics. Dr. Don O'Donoghue was appointed chairman. A major mandate was to develop a sophisticated postgraduate course on sports medicine for orthopaedic surgeons and other physicians with a special interest in the care of the athlete. At this postgraduate course approximately twenty very fine papers were presented and appropriately, the papers presented at this course have now been compiled as a birthday volume to Dr. O'Donoghue.

The essayist of each of the individual papers is an expert in his field and all have a definite interest and insight into the problems of treating sports injuries. The articles are varied in their topics and include problems of evaluation of perspective athletes, as well as detailed reports of the effect of altitude on the athletes during the most recent olympic games. All of the extremities with reference to the most frequent injuries are well covered and I feel that the six separate papers dealing with knee injuries are the best that I have seen.

This book would definitely be of benefit as a reference for any physician who is dealing with athletic injuries, whether he be an orthopaedic specialist or not. There are one hundred ninety-nine illustrations, which are all very well done and very clearly produced on paper.

I feel that the Committee on Sports Medicine of the American Academy of Orthopaedic Surgeons should be commended on this publication and recommend it highly to any physician dealing with these problems.

H. LOWRY RUSH, JR., M.D.

New Books Received

The Practice of Refraction. By Sir Stewart Duke-Elder, M.D., Ph.D., F.A.C.S. 321 pages with 244 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$11.75.

THE LITERATURE / Continued

Acute Renal Failure: Diagnosis and Management. By Robert G. Muehrcke, M.D., F.A.C.P. 263 pages with 126 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$19.75.

Health Education. By Bernice R. Moss, Ed.D., Warren H. Southworth, Dr. P.H., and John Lester Reichart, M.D. Washington, D. C.: National Education Association of the United States, 1969. Fifth Edition. \$5.00.

Cardiac Arrest and Resuscitation. By Hugh E. Stephenson, Jr., M.D., F.A.C.S. 500 pages with 223 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$29.50.

Handbook of Ocular Therapeutics and Pharmacology. By Philip P. Ellis, M.D., and Donn L. Smith, M.D. and Ph.D. St. Louis: The C. V. Mosby Company, 1969. Third Edition. \$10.75.

Fundamentals of Inhalation Therapy. By Donald F. Egan, M.D. 468 pages with 148 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$11.00.

Arrows of Mercy. By Philip Smith. 236 pages. Garden City N. Y.: Doubleday and Company, 1969. \$5.95.

FDA Warns Against Bard Urethral Catheters

The Food and Drug Administration has issued a warning to all physicians and clinics against using 49 types of urethral catheter trays and kits produced by C. R. Bard, Inc., of Murray Hill, N. J.

All of these trays contain a packet of cleansing solution or "detergicide." This "detergicide," also called "prep solution," "cleansing solution," or "antiseptic towlette," has been found to contain bacteria of pseudomonas species, commonly known as EO-1, a pathogenic organism which may produce severe genitourinary infections.

C. R. Bard, Inc., undertook a voluntary recall in Sept. of the contaminated trays from its distributors and from hospitals in the United States and Canada. FDA has determined that the recall was not effective due in part to lack of cooperation by several large distributors who declined to participate.

FDA attempted to warn nursing homes and the medical profession of the dangers involved in the use of these trays by issuing a press release in Oct.

Administration checks on dissemination of the warning revealed, however, that the majority of nursing and convalescent homes are still unaware of the recall or the health hazards of the catheter trays containing the contaminated detergent. They are still in use in many institutions.

Recently a marked increase in severe genitourinary infections associated with the use of the catheter trays containing the contaminated agent has been reported by hospital authorities.

Additional investigations by the FDA have also disclosed non-sterility of some of the lubricant jelly packs in the Bard trays. Both FDA and AMA are attempting to alert all physicians associated with hospitals, urologic clinics, nursing and convalescent homes, to take immediate steps to check all stocks of sterile urethral catheter trays or kits from C. R. Bard, Inc. They should arrange for prompt return to the supplier of any existing stocks bearing any of the following re-order or item numbers:

7501, 7503, 7505, 7602, 7602P, 7604, 7610, 8145, 8214, 8216, 8218, 8220, 8300, 8364-16, 8364-18, 8365-16, 8365-18, 8400, 8401, 8464-16, 8464-18, 8464D-16, 8464D-18, 8465-16, 8465-18, 8500, 8501, 8504-16, 8504-18, 8505-16, 8505-18, 8505A-16, 8505A-18, 8554, 8556, 8554-A, 8556-A, 8558, 8558-A, 8560, 8810, 8816, 8816-A, 8818, 8818-A, 8819, 4200, 4210, 8556-A, 8560-A.

Frontiers of Medicine 1970 Scheduled

Registrations are being accepted for Frontiers of Medicine 1970 to be held in Lakeland, Florida, Feb. 18 through 20. The meeting, sponsored by the Lakeland Graduate Medical Assembly, has been approved by the American Academy of General Practice for 14 hours elective credit.

A wide range of current medical topics is offered by this year's Frontiers of Medicine program with an outstanding guest faculty from throughout the United States.

Co-sponsors of the Frontiers meeting—which last year was highlighted by Drs. Christiaan Barnard and Denton Cooley—are the medical staffs of Winter Haven Hospital and Bartow Memorial Hospital.

Registration fee is \$100. For details, contact the Lakeland Graduate Medical Assembly, P. O. Box 23335, Lakeland, Florida 33830 (813/683-1636 or 683-2038).



USM Student Health Services Offers Comprehensive Campus Care Program

One of the more important buildings at the University of Southern Mississippi in Hattiesburg is a modest two-story brick and tile structure on the main campus, nestled between a cluster of more imposing "cousins."

The unit is the USM Infirmary, where despite a relatively limited floor space as compared to dormitory and classroom buildings, an astounding number of students trek annually through its doors.

Constructed in 1962, the unit replaced an outdated wooden building which had long since

seen its best days. The present infirmary has about 10,000 square feet of assignable area, 36 beds, and all of the necessary rooms for the services offered.

Dr. Thomas S. Martin is director of Student Health Services, and is now entering his fourth year with the school. Dr. Martin serves also as team physician, and as assistant professor of health and physical education, teaches some classes.

The staff at the infirmary consists of Dr. Martin and seven registered nurses, who rotate hours according to work load levels, so as to provide 24-hour service. For a time a second physician was available full-time. However Dr. Andin C. McLeod, Jr. has now left in order to obtain further specialized training.

The Student Health Services is supported by a health fee which is included in an incidental fee. Broadly it covers clinical and hospital services limited to cases of ordinary illness. The University does not assume responsibility in cases of extended illness or for treatment of chronic diseases. Cases requiring surgery are handled by a physician and hospital of the student's choice.

After initial evaluation and possible treatment, the USM infirmary may make further disposition of the patient, including continued treatment of minor illnesses either as a bed patient or as an ambulatory out-patient; referral to a local private physician or clinic for further diagnostic evaluation and treatment if the case is other than a routine minor illness; send the patient home to the care of his local physician if the condition warrants, and especially if the expected duration of illness is lengthy; or requires hospitalization.

The School Health Service attempts to monitor and maintain surveillance over the student's



Though small in size, in contrast to towering Pulley Hall at right, the University of Southern Mississippi's Health Services Clinic is a busy place, sometimes treating more than 6,000 out-patients a quarter. Only a portion of the two-story, 36-bed infirmary is visible here. Dr. Thomas S. Martin, M.D. is Director of Health Services at USM.

ORGANIZATION / Continued

general health, while he is away from home, and to offer liaison between his own family physician, his parents, and/or his local physician.

Types of illness most frequently encountered, and their disposition, include:

The various types of tonsilopharyngitis are the most common illnesses seen. Where the duration is short, they are treated at the infirmary, but where a period of several weeks is anticipated, the cases are sent home for treatment by the family physician. Since it is important to identify and separate the cases of streptococcus bacterial sore throats so that they may be adequately treated in order to prevent rheumatic fever, a throat culture is taken in most cases, done by the State Board of Health at no charge.

Sprains and strains during intramural seasons and late afternoon activities produce many musculoskeletal injuries that are treated at the school. The nurses are well-trained in physical therapy measures. An ice machine and a whirlpool bath have proven invaluable. Other orthopedic problems are generally referred to local orthopedic surgeons, of which there are now four in Hattiesburg.

Lacerations that occur on campus as a result of accidents, intramurals, or athletics are surgically repaired in the clinic. Those resulting from automobile accidents and off-campus incidents are referred to the Forrest General Hospital emergency room. Though not deemed the responsibility of the school, the school physician is usually called upon by the hospital to care for these patients in the emergency room, the student bearing the cost.

Respiratory problems, most being of viral origin, are amenable to bed rest, anti-pyretics, and expectorants. More severe cases are often referred to the care of a local or home-town physician. X-rays are sometimes required, at the student's expense, and are made at the Forrest General Hospital.

Bacterial pneumonia is generally not considered a minor illness, but is sometimes treated on-campus, out of necessity or special convenience to the patient.

Viral influenza does not lend itself to adequate treatment on the campus and victims are too ill to attend class. Because of this and the usual long duration, victims are sent home, as a rule, where there is a better chance for a more rapid recovery. In September, preventive "flu-shots" are offered—but the protection rate is only about

30 per cent and only a relatively few students and faculty avail themselves of the vaccine.

Gastrointestinal problems constitute the second most frequent complaint on campus, embracing the syndrome of nausea, vomiting, and diarrhea. Some of these illnesses are food-borne in origin, while most are the result of viral infection. Generally, an overnight stay in the clinic with proper supportive measures is adequate for recovery. Acute abdominal emergencies are referred elsewhere.

The clinic is equipped to handle acute asthmatic attacks, and other emergency situations due to allergies. Allergy injections, prescribed by private physicians, are administered by the nursing staff according to directions given by the student's physician.

Emotional problems embracing acute hysteria, very mild depression, or anxiety cases fall in the category of minor illnesses, but more severe cases are referred elsewhere. Under the direction of a psychiatrist a student may be observed for several days in the clinic, when requested by his physician.

Genitourinary problems include cystitis, usually treated at the clinic and followed up with referral to specialists when required; and kidney trauma, with the clinic used in precautionary observation, thus saving the student a large hospital bill.

The USM Clinic operates around the clock during each school quarter. Two scheduled clinics are held daily, one in the morning, the other in late afternoon. The late "sick call" draws the most patients. A daily clinic load for the physician may consist of as few as 35 patients to a peak of 124.

The clinic operation provides most of the commonly used drugs to the student body free of charge. They often issue drugs such as antihistamines, antibiotics, and antipyretics. Many prescriptions must still be written however and filled by area drug stores at student cost.

A universal problem for student health services is kept under moderate control at USM. Written excuses to class instructors for class absences are not provided. At an institution of nearly 8,000 students, this has eliminated the unending lines of "written-excuse-seekers." However the student is encouraged to explain his problems to the instructors, and verification of clinic visits via telephone is always available if the instructor calls.

An indication of the patient load experienced over a period of time at USM is the fact that

4,576 out-patients were treated during spring quarter as compared to 6,220 during winter quarter, 1969. During the same periods, 282 bed patients were provided for in spring quarter, and 387 during winter quarter.

Presently Southern is seeking another full time physician. "We hope to attract another man of Dr. Martin's caliber," Dean Peter E. Durkee comments. Any inquiries from interested physicians should be directed to Dr. Durkee, Dean of Student Affairs, Box 7, Southern Station, Hattiesburg, Miss. 39401.

MSU Mitchell Lectures Features Dr. Cooper

The C. B. Mitchell Lectures of Mississippi State University this year featured Dr. Louis Z. Cooper, one of the nation's leading researchers on the Rubella or "German Measles" problem.

The second distinguished lecturer in the MSU series, Dr. Cooper is author of "Rubella: A Preventable Cause of Birth Defects." He received his M.D. degree from Yale University School of Medicine and is currently affiliated with the New York University Medical Center and Bellevue Hospital.

While on campus Dr. Cooper spoke to pre-med students about challenges in the fields of career research, internal medicine, and pediatrics. On Mon., Dec. 8, he conducted an extensive testing of several thousand young women of child-bearing age to determine their susceptibility to Rubella.

Rubella, more commonly known as German or Three Day Measles, accounts for birth defects in hundreds of children each year. This year a "giant leap" in medicine was the production of an effective vaccine for Rubella along with a simple new technique for determining individual susceptibility (or immunity) to this previously wide-spread "childhood" disease.

The initial use of the vaccine is to go to all children who are primarily responsible for the epidemic spread of Rubella and the exposure to susceptible mothers-to-be. Prospective mothers should then be tested for immunity. Dr. Cooper says, "The concept is to vaccinate children to protect the mothers."

The test for immunity consists of a drop of blood on a piece of filter paper. This properly

identified specimen processed in Dr. Cooper's laboratory can determine if the patient has ever had Rubella. He estimates that there are 2,000,000 women of child-bearing age in this country who are susceptible.

The C. B. Mitchell Lectures initiated last year was tremendously successful with the two days and nights of appearances of the world known authority on the health hazards of tobacco, Dr. Alton Ochsner of New Orleans.

The C. B. Mitchell Pre-Med Fund was established in 1967 by Mississippi State University Medical Alumni and friends in recognition of the need for an enriched premedical curriculum at Mississippi State and in honor of the doctor who served MSU students for so many years as college physician.

The program was supported in part by the Merck Sharp and Dohme Post-Graduate Medical Program and the Oktibbeha County March of Dimes.

Self-Employed M.D.'s Insured for Disability

Many self-employed physicians reached an important social security landmark this October. With their earnings covered since 1965, they have now contributed to social security long enough to be insured for disability.

Social security disability benefits can be paid to an insured person under 65 who has a physical or mental impairment so severe as to keep him from doing any substantial work for a year or longer. Payments begin after a waiting period of 6 full calendar months.

Benefits can be as much as \$218 a month for a disabled person alone and up to \$434.40 a month for a family. Self-employed physicians disabled in the immediate future, however, would probably not yet be eligible for these maximums since their earnings have been covered by social security for a relatively short time. Benefits are figured from a person's average covered earnings over a period of years.

"This disability protection can be a valuable supplement to the physician's private insurance," said Bernard Popick, director of social security's disability program. "It is part of the total social security package of protection—disability, retirement, survivors and health insurance—toward which the physician has been contributing."

AMA's Dr. McCleave Is MSMA and UMC Guest

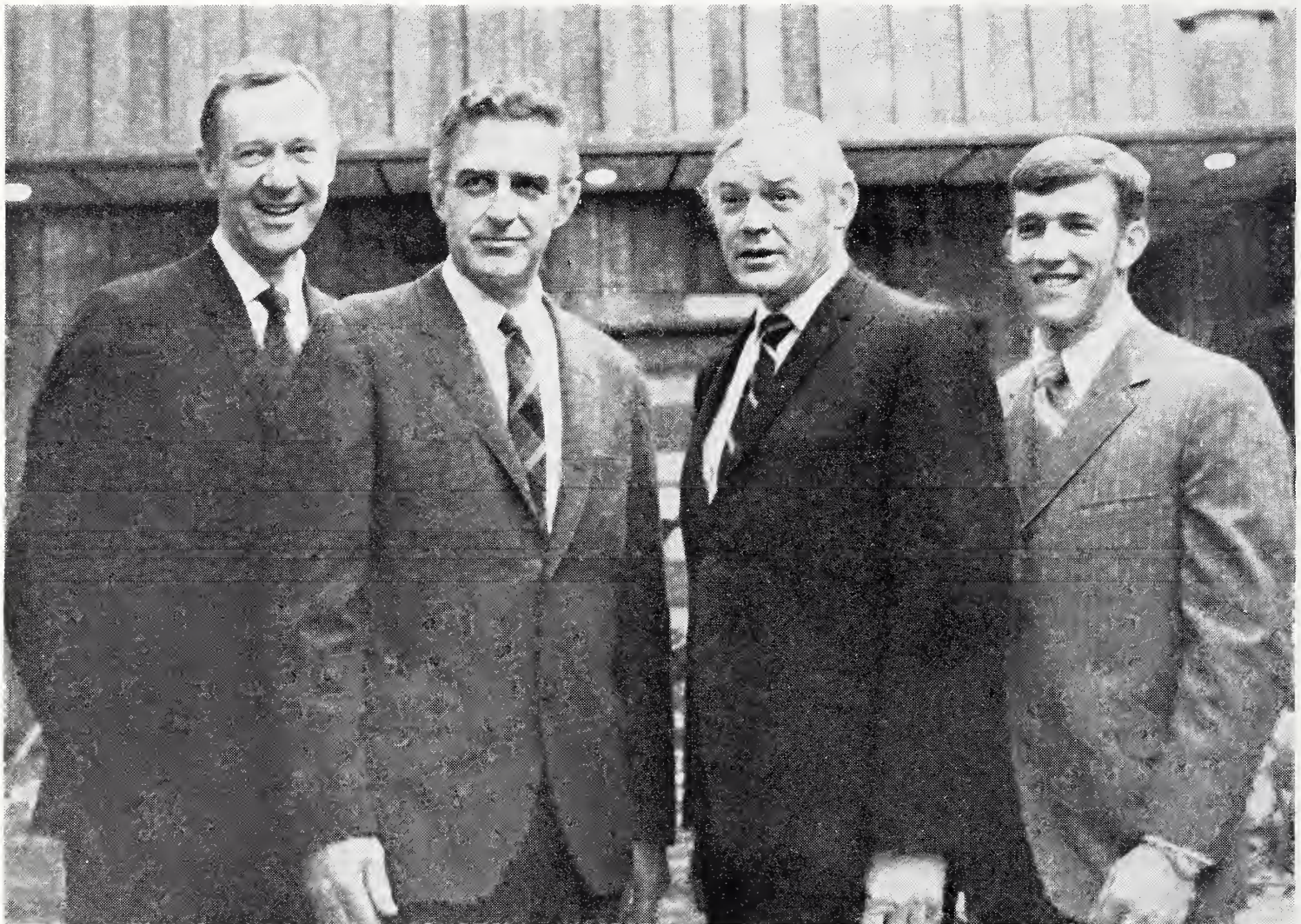
As part of the continuing program of the MSMA Committee on Medicine and Religion, The Rev. Dr. Paul D. McCleave, director of the AMA department of medicine and religion, met with the state committee and appeared before the student assembly at the University Medical Center in late November.

In his remarks to the committee and the students, Dr. McCleave addressed himself to the care of the whole man and to problems in patient care related both to physical aspects and to moral issues confronting both patients and physicians.

Dr. John M. Alford, Jr. of Greenwood, chairman, presided at the MSMA committee meeting. John Sanders, president of the junior class at UMC and chairman of the student assembly committee, served as host to Dr. McCleave. Also appearing on the program was Thad Waites of Waynesboro, student body president.

At the state association meeting, members of the UMC student government as well as Dr. Robert E. Carter, medical school dean and director, were present as guests of the committee.

The Committee on Medicine and Religion is a constitutional body of the association whose members are Drs. Andrew K. Martinolich, Jr., of Bay St. Louis, F. C. Minkler, Jr., of Pascagoula, S. Lamar Bailey of Kosciusko, Eugene M. Murphey, III, of Tupelo, Julian Wiener of Jackson, and Dr. Alford, chairman.



Highlighting the MSMA Committee on Medicine and Religion meeting at which Dr. Paul McCleave, second from right, director of the AMA department of medicine and religion, appeared was a private luncheon at Primos' Northgate Restaurants. Discuss-

ing Dr. McCleave's address are from left, Dr. Robert Carter, UMC director and dean; Dr. John Alford, MSMA committee chairman; and John Sanders, chairman of the medical center student assembly committee.

Regional Medical Expands Activities

Out of the planning and into the doing phase as of July 1, the Mississippi Regional Medical Program has mounted seven new projects and is set to expand two established activities with a \$1,527,930 grant for 1969-70.

The award from the Division of Regional Medical Programs, Health Services and Mental Health Administration, DHEW, also covers cost of developing additional projects to improve the quality and availability of diagnosis and treatment of heart disease, cancer, stroke, and related diseases in Mississippi.

Says Dr. Guy Campbell, Mississippi coordinator, the seven new projects are pieces of an over-all plan to provide more health manpower, and improve the health service delivery system by *linking* to available resources such as the State Board of Health, Office of Comprehensive Health Planning, and the University Medical Center.

Emphasis thus far is on continuing education and on clinic expansion, he says. New programs are:

Mississippi Postgraduate Institute in the Medical Sciences, described elsewhere in this publication, with the Mississippi State Medical Association and University Medical Center as co-applicants.

Recruitment of Health Manpower in Mississippi—a Mississippi Hospital Association program to stimulate student interest in health careers and initiation of now nonexistent allied health training programs.

Cardiovascular Clinics—The State Board of Health plan to strengthen its heart clinic network with the cooperation of local physicians, the Medical Center and the Mississippi Heart Association.

A System of Coronary Care Units in Mississippi—a University Medical Center project to establish an exemplary coronary care unit in the teaching hospital as the first step in a system of regional centers which may monitor individual beds in smaller hospitals in the area.

Therapy Training and Consultation Program—The Medical Center's project to begin correction of deficiencies in personnel, facilities, and educational opportunities in radiation therapy so the service can be expanded and upgraded throughout the state. The first year's budget will finance purchase of a linear accelerator.

Regional Comprehensive Neurology Clinics—The State Board of Health and Medical Center

joint plan for clinics in six cities to cover all neurological disease with emphasis on stroke and with input from a primary and a rehabilitation team, and correlation with the heart clinics and the demonstration stroke unit at University.

Comprehensive Renal Disease Training Program—A Medical Center application to carry out training programs for physicians, nurses, and others who care for nephrology patients, including those on chronic dialysis.

Three-year funding was approved for five of the seven projects.

The grant also covers renovation funds for the pulmonary disease training program initiated as a feasibility study under earmarked money last March.

Support also continues for the four-bed Demonstration Stroke Unit which is to expand to six beds with the renovation of the vacated seventh floor nursing unit to be shared with the Clinical Research Center.

In approving the Mississippi program for operational activities, the national reviewing bodies noted the involvement of major health organizations such as the Mississippi State Medical Association in the planning process, the close tie-in with the Office of Comprehensive Health Planning, and cordial relationship with adjoining regions. Mississippi's avowed intent to do first what can be done with existing resources and the region's recognition of its health manpower as its key asset were seen as strengths in an early progression from planning to activation.

Florida Hosts PG Education Program

The Department of Psychiatry of the University of Florida College of Medicine and the north-east, central and southwest chapters of the Florida Psychiatric Society will co-sponsor a program of continuing education in Gainesville, Florida on Feb. 10-11, 1970. The program will consist of lectures and workshops and will feature Dr. Harold Rosen of Johns Hopkins University of "Psychiatry and the Abortion Laws" and "Hypnosis in Psychiatry." Dr. Samuel R. Warson of the department of psychiatry is director of the workshop.

For programs and reservations requests should be directed to the Division of Postgraduate Education, J. Hillis Miller Health Center, Box 758, University of Florida, Gainesville, Florida 32601, Tel. 904-392-3143. A general announcement brochure will be distributed about Dec. 15.

UMC and MSBH Set Up Neurological Clinics

Two state agencies have pooled resources to put a new medical team in the field conducting clinics for victims of neurological diseases and related disorders.

Working together on the team are the State Board of Health, through its Division of General Health Services, and the University of Mississippi Medical Center in Jackson.

The effort is officially titled the Regional Comprehensive Neurology Clinics project and is made possible under a grant from the Mississippi Regional Medical Program.

The team includes neurologists and resident physicians from the Medical Center, and a social worker, and it is supplemented at each clinic by State Board of Health nurses.

It conducts clinics on the third Monday and Tuesday of each month, spending one full day in each of six selected municipalities over a three-month period.

Two clinics are held in the State Board of Health county health department facilities in Meridian, Hattiesburg, Pascagoula, Gulfport, Cleveland and Indianola.

Dr. Frank M. Wiygul, Jr., director of the Division of General Health Services, State Board of Health, estimates that at least 1,000 patients will be seen through this new project over a one-year period.

He estimates 35 patients can be seen each clinic day, or 70 patients a month, for a total of 840 patients a year at the clinics, with another 160 referred from the clinics to the medical center.

Theoda Griffith and Terry Beck, working with Dr. Wiygul in the General Health Services Division in setting up the clinic schedules, say the estimate may be on the conservative side.

"In addition to the medical team," says Dr. Wiygul, "we have plans for a follow-up team, including an electroencephalogram technician, a physical therapist and a speech therapist.

"Patients with strokes and other neurological conditions which need more medical attention will be referred to University Hospital for admission either to neurological service or to the stroke center."

The aim of the project, says Dr. Wiygul, is to provide neurological consultation for patients out-

side of the central-Mississippi area which has comparatively easy access to facilities in Jackson.

"We want to provide improved diagnostic capability and over-all neurological care through laboratory procedures which are not routinely available elsewhere in the state," Dr. Wiygul adds.

"The project also should develop referral resources for physicians in private practice, and it will develop community awareness of the special services needed by those with neurological diseases.

"We also will provide neurological consultant services to other health-related programs and orient existing health-resources agencies toward more comprehensive stroke evaluation and care."

He said there is a possibility of expanding the project to the state's northernmost counties through a related project grant utilizing the University of Tennessee Medical School in Memphis.

The project now under way was approved for three years with the first year's grant approximately \$60,000.

Dr. Wiygul pointed out that the current project is an outgrowth of an earlier epilepsy project which lasted five years with which he was associated, and which was restricted to children.

Court Gives Upjohn Right to Argue

The U. S. Court of Appeals in Cincinnati, Ohio, has told The Upjohn Company that in December the court would hear oral argument on legal action by the company to prevent the Federal Food and Drug Administration from enforcing its order of Sept. 19, which would remove seven of the company's combination antibiotic products from the market.

The court noted that the Food and Drug Administration had voluntarily agreed to suspend action against the products pending a decision by the court.

At the December hearing the court will hear argument on why the Sept. 19 order is illegal in seeking to remove the products from the market.

"The products like Panalba have been used widely and successfully for many years," R. T. Parfet, Jr., president and general manager of Upjohn, said. "We believe the FDA is in error in its attempt to remove them from the market and that the FDA action is unjustified."

Rubella Campaign Gets Good Results

State Board of Health officials report a satisfactory response thus far to a long-range Rubella immunization campaign concentrating on five-year-olds and six-year-olds.

"We don't have enough vaccine to go into all 82 counties at once," said Paul M. Turner, Jr., state coordinator for the Vaccination Assistance Program of the State Board of Health.

He said county-wide campaigns already have been carried out in Lamar and Perry counties, with some 70 per cent of the first-grade and second-grade children immunized in those two counties.

He said additional campaigns are already planned for Quitman, Benton, Claiborne, Copiah and Hinds counties and others will be announcing from day-to-day as "local health departments tool up to give the immunizations."

"As the vaccine becomes more readily available," said Turner, "other health departments will make plans for clinics" in their local schools and Head Start centers. He added:

"State Board of Health technicians will go into these counties at the request of the local health departments, as each county takes on the responsibility of immunizing their children."

Turner said the State Board of Health will soon release single-dose and ten-dose vials of Rubella vaccine to all 82 counties for routine use.

He pointed out at that time that the campaign is an "open-end" proposition, without deadlines, since reaching all five-year-old and six-year-old children in the state will take time.

He also noted that reaching this age group is only the first phase of the total plan, which eventually will reach children up to age 11.

"We're talking about a ten-year span of age categories," he said, "with more children coming on each year. That means at least 500,000 children. We estimate that the State Board of Health would immunize half, and private physicians half, so we're talking about 250,000 children."

Dr. Blakey said the program might take three years and calls for a "massive effort" concentrated both in time and in a sequence of priority age-groups.

He said Rubella "is one of the major known causes of congenital defects, such as heart disease, blindness and deafness," and five-year-olds and six-year-olds are the most susceptible age groups.

Allergy Academy Announces PG Course

The American Academy of Allergy has announced the program for a postgraduate course to be held Feb. 14-15, 1970, in the Jung Hotel, New Orleans, La.

Major topics to be covered include pulmonary diseases and asthma, developments in medicine relating to allergy, clinical immunology, and organ transplantation.

Featured speakers are Dr. Gustave A. Laurenzi, St. Vincent Hospital of Worcester, Mass.; Professor Jack Pepys, Institute of Diseases of the Chest of London; Dr. Eugene Robbins, University of Pittsburgh, Pa.; Dr. Charles R. Park of Vanderbilt University; Drs. Thomas C. Merigan and Keith B. Taylor of Stanford University.

Other lecturers include: Dr. Fred Rosen of Harvard; Ray D. Owen, Ph.D., California Institute of Technology at Pasadena; R. E. Billingham, D.Sc., University of Pennsylvania at Philadelphia; and Dr. David Hume, Medical College of Virginia at Richmond.

Miss. Med. Assistant Named AAMA Trustee

Mrs. Thomas D. Pace, Jr., Mississippi's first certified medical assistant, was named trustee of the American Association of Medical Assistants at their 13th annual convention in Honolulu.


Mrs. Pace, who lives at 4545 Meadow Hill Drive, is administrative assistant to Dr. Myra Tyler at the University of Mississippi Medical Center.

She also was appointed as chairman of the AAMA junior college coordination committee, by the AAMA executive committee.

Mrs. Pace is president of the Mississippi Association of Medical Assistants, vice president of the Jackson Symphony League and chairman of the Mississippi Art Association.

Featured speakers at the Honolulu convention included AMA President Gerald D. Dorman of New York and Dr. Christiaan N. Barnard of Johannesburg, Union of South Africa.

AAMA's 1970 convention will be held in Des Moines, Iowa.



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Medical Response to Camille Evaluated

An evaluation of the medical response to Hurricane Camille is under way following a disaster-evaluation planning conference in Gulfport.

Dr. Henry C. Huntley, Washington, D. C., chief of the Emergency Health Service division of H.E.W., flew to the coast to look at the disaster area and to attend the conference.

Afterwards, he said he will send interviewers from his office within the next week or so to prepare a comprehensive report on health services rendered in the wake of the hurricane.

"This disaster," said Dr. Huntley, "affected more people to a greater extent—in a concentrated population area—than any other in the United States in modern times.

"I've seen many disasters, but I've never seen the destruction and the number of people affected as I have here. I'm very impressed by the response of the community and the state."

Dr. H. B. Cottrell, state health officer, Mississippi State Board of Health, cited "splendid cooperation between the medical community and the State Board of Health" in coping with the disaster.

He said follow-up work related to health services "will take weeks—maybe months," especially as regards environmental health—a responsibility of the State Board of Health's Division of Sanitary Engineering.

Dr. Cottrell pointed to the need of continuous, long-range "collaboration and joint planning" by all health agencies and the related organizations at all levels involved in disaster work.

The Mississippi State Medical Association was represented at the high-level critique by Dr. C. D. Taylor, chief of the medical staff of Gulfport Memorial Hospital, where the meeting was held.

Representing the Mississippi Hospital Association were Richard H. Malone, president of Hinds General Hospital in Jackson and president of the M.H.A., and Charles W. Flynn, Jackson, M.H.A. executive director.

Also in attendance were administrative personnel of coast-area hospitals, Keesler Air Force Base U.S.A.F. Medical Center, the Veterans Administration Center at Biloxi, and the State Board of Health.

A report on State Board of Health activities from the agency's Gulf Coast Disaster Head-

quarters in the Harrison County Health Department in Gulfport was given by Dr. Frank J. Morgan, Jr., assistant state health officer.

A report on liaison between the State Board of Health and the coast-area medical community was presented by Dr. Edward C. Hamilton, vice chief of surgery, Gulfport Memorial Hospital.

Presiding at the two-hour meeting was Walter C. Hughes, Atlanta, program director, Division of Emergency Health Service, H.E.W. Hosting the meeting was Charles Wimberly, administrator, Gulfport Memorial Hospital.

Cardiovascular Specialists Schedule Session

The American College of Cardiology, the national medical society for specialists and research scientists in cardiovascular diseases, will hold its 19th Annual Scientific Session Feb. 25-March 1, 1970 in New Orleans, La. All sessions will be held at The Rivergate Center.

Major scientific symposia will include such topics as surgery for complications of myocardial infarctions, cardiac valve substitution and pulmonary circulation. A new feature at the meeting this year will be a core curriculum in clinical cardiology and a self-assessment classroom.

A special group of panel discussions, called Controversies in Cardiology, will feature discussions by authorities on opposing sides of current issues. Topics will include prevention of atherosclerosis, homografts vs. prosthetic heart valves, alcoholic heart disease and surgery for coronary disease.

Doctors attending the meeting will also have a choice of 20 evening Fireside Conferences, 21 Luncheon panels, Clinical Conversations with Master Teachers, and a Round of Clinics and Demonstrations being arranged with hospitals and medical schools in the New Orleans area, according to B. L. Martz, M.D., Indianapolis, Ind., college president.

George E. Burch, M.D. and Allan M. Goldman, M.D., both of New Orleans, La., are general co-chairmen of the session. Dr. Burch is past president of the college and professor and chairman of the department of medicine at Tulane University Medical School. Dr. Goldman is professor of clinical medicine at the medical school.

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Israeli Develops Artificial Limb

An Israeli engineer has introduced a unique lightweight artificial arm having six movements which may be operated by electric impulses derived from muscle contraction.

Dr. Dino Bousso of the Technion-Israel Institute of Technology (Haifa, Israel), described the gas-powered limb as a "marked advance" in rehabilitation medicine at a press conference at the Institute of Rehabilitation Medicine of the New York University Medical Center.

"We are at the stage where we have an arm much lighter and versatile than anything available, using electric control and pneumatic power," Dr. Bousso declared.

"I welcome this opportunity to bring the arm to the Institute of Rehabilitation Medicine for further evaluation.

"It is this type of international cooperation which furthers our field of expertise—and benefits mankind."

Dr. Bousso, who developed the 13-ounce arm, said the limb's "weight, simplicity and evenness of motion" are among its unique features. He is at the Institute on a grant and wants to evoke interest in the Technion-Bousso arm in America.

In describing the arm, which is at the laboratory development stage, he said electric muscle impulses control the gas flow which pneumatically powers its six movements—the only artificial limb to perform in such a versatile manner.

Here's the way the Bousso arm works:

Electrodes, placed on muscles which can be voluntarily tensed, pick up minute electrical impulses generated in the muscles whenever the patient's brain wills them to contract.

These electrical impulses, when amplified, operate a pneumatic solenoid valve that regulates gas flow into the actuators.

The limb is one-third the weight of other artificial limbs enabling children to use it, according to Dr. Bousso. It is also structured so a child can recharge the gas container alone.

The arm is comprised of light aluminum alloys and high-strength plastic material—mainly nylon.

Features of the Bousso limb include:

- close simulation of normal arm movements through use of a special rotary actuator.

- extremely low weight of the limb which uses gas as its energy source, and doubling of control signals which can be obtained per muscle.

- simplicity and compactness of the electronic

circuit which can be fitted into the arm itself, and ease in operating the limb.

Dr. Bousso's research was supported by a \$40,000 grant from two private British charity funds—the Lady Hoare Thalidomide Appeal and the Goudie Trust—designed to help the nearly 5,000 European children afflicted by the drug while their mothers were pregnant.

Dr. Bousso began his research by concentrating on developing a rotary actuator which transforms energy directly into rotary motion.

He was able to produce a new type rotary pouch actuator with high efficiency, low volume and weight, suited to perform more movements and carry higher loads than the piston actuators used up to now.

The result was an artificial limb with six different movements. Gripping elements of the limbs are equipped with optical gauges which indicate the amount of force exerted.

The limbs are harnessed to the body by a corset molded to the contours of the user. Limb components can be extended as the child grows. Working pressure of the gas also can be accelerated to increase its power.



Dr. Dino Bousso of the Technion-Israel Institute of Technology (Haifa, Israel), displays unique gas-powered 13 oz. arm—said to be lightest ever conceived. The Technion-Bousso arm, comprised of aluminum and plastic—mainly nylon, has six movements, also a first, which Dr. Bousso described as a "marked advance" in rehabilitation medicine.

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may overgrow; treat superinfection appropriately. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative

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UAB Uses MIRU Computer

A great deal of human brainpower went into the planning of the University of Alabama Medical Center's Myocardial Infarction Research Unit, but when the unit begins operation next month, an electronic brain takes over some of the actual work—a brain which can calculate the interaction of a vast number of details and come up with a split-second response.

The computer which backs up the operation of MIRU was installed at a cost of \$309,000 and is programmed solely for the University Hospital unit, relieving paramedical personnel of many time-consuming duties and providing a constant flow of information from patient to memory bank.

Not only will the MIRU computer monitor bodily functions and provide, with the touch of a button, almost any kind of information required by doctors, nurses, or technicians, but it will constantly increase its store of information about myocardial infarction, enabling doctors to expand their knowledge of how to combat the disease.

The computer is not new—there are other IBM 1800's in existence. But what is being done with it is new and innovative. The computer is designed to monitor several patients at one time, instantly providing vital information to those in charge, whenever they need it.

Previous monitoring systems have been less flexible than that used by the UAB computer. There were limitations on which types of research programs could be incorporated without interfering with the patient monitoring activities.

The MIRU system is continuously collecting information about the patients in the unit to permit intensive supervision, with alarms for the staff when significant changes occur. The collected information is saved on magnetic tape to provide the tremendous amounts of data needed for later research use.

In the past, the different functions of monitoring systems had to be separately and independently constructed. The new UAB MIRU system retains common elements which are always available to be called into action when needed, providing the flexibility which has previously been sacrificed in order to gain high computer performance.

The computer will be programmed to make life-and-death decisions only when criteria for the decisions can be stated in quantitative terms by the doctor. It will always operate under a phy-

sician's control, whether he is physically present or not. The machine cannot replace a doctor's care, but it will supplement and assist him in ways a human brain is neither rapid enough nor vast enough to do.

According to MIRU senior systems analyst Steven E. Wixson, "The health sciences are now entering the age of the computer, an age when stopping a computer's operation, even for a moment, may represent a hazard to the patient."

The MIRU installation is designed to continue functioning even when some of the components fail electronically. Parts of the system are used primarily for research by the UA School of Medicine faculty—other equipment is for research as well as for continuous monitoring and evaluation of bodily functions in patients.

Some units of the computer have duplicate parts which are interchangeable, allowing the research section to assume those functions of the monitoring section in case of sudden failure in operation. Such duplication has been the rule wherever the research needs have justified expenditure for equipment.

Scientists anticipate a day when computer-collected information will enable the physician to perform his duties in regulating patient care with more efficiency and accuracy than is now possible.

Answers to Cancer Quiz

From *Cancer Facts and Figures*, The American Cancer Society:

1. (b) 15%. The current figure is approximately 16% of deaths in the U.S.A. are cancer deaths.
2. (b) Slightly over 300,000 annual deaths.
3. (b) Slightly over 1 death every two minutes.
4. (c) 55% men/45% women.
5. (c) Lung cancer, 1st approximately 52,000, and (d) rectal-colon, 2nd approximately 44,000.
6. (a) Lung cancer, 1st approximately 44,000, and (b) rectal-colon 2nd, approximately 21,000.
7. (b) Breast cancer, 1st approximately 27,000 and (d) rectal-colon cancer, approximately 23,000.
8. (d) Skin cancer.
9. (c) A little over 3,000.
10. (b) Approximately 21 patients in a local community of 5,000 will be under cancer care. Of these, 7 will die. Of the 14 new cases diagnosed during the year, 5 will be cured.

Gastroenterology Course Planned for Internists

The American College of Physicians (ACP) will hold a five-day postgraduate course on "Function and Dysfunction of Gastrointestinal Tract" Jan. 2-6, 1970 in Bal Harbour, Fla.

The course, being held in cooperation with the University of Miami School of Medicine, will be held at the Americana Hotel. It is one of 25 postgraduate courses the ACP is conducting throughout the United States and Canada during the 1969-70 academic year to help specialists in internal medicine keep abreast of new knowledge and techniques in the diagnosis and treatment of diseases.

The Bal Harbour course will concentrate on recent advances in gastroenterology that relate to normal and abnormal function, particularly in regard to gastrointestinal secretions and absorptions. Panel discussions will be concerned with diagnostic and therapeutic controversies and will be held daily. Self-assessment examinations will be available for those internists who wish to take them.

Martin H. Kalser, M.D., Miami, Fla. professor of medicine and physiology (gastroenterology) at the University of Miami School of Medicine, is course director. Co-director is Arvey I. Rogers, M.D., Miami, assistant professor of medicine at the medical school and chief of the gastroenterology section at the Miami Veterans Administration Hospital. The faculty for the course will be drawn from the medical school, with guest lecturers from the Albert Einstein School of Medicine, the Mayo Clinic, the University of Illinois, Boston University and other institutions.

Tri-State Thoracic Society Meets

Chest specialists from Mississippi, Alabama, and Louisiana will convene in Biloxi at the Buena Vista Hotel on Friday and Saturday, Jan. 10 and 11, for the 14th Annual Tri-State Thoracic Society Consecutive Case Conference, according to an announcement by Dr. Wilfred Cole, president, Mississippi Thoracic Society.

This special scientific meeting is co-sponsored by the thoracic societies and tuberculosis and respiratory disease associations of Mississippi, Alabama, and Louisiana.

Members of the Mississippi Thoracic Society featured on the program during the two day session include Drs. H. Richard Johnson, Rush Netterville, Charles Parkman, Bob Robertson, Walter Treadwell, and Myra Tyler, all of Jackson. Dr. G. Boyd Shaw, Jackson, will serve as moderator for one of the three scientific sessions.

Guest discussants invited for the two day conference will be: Dr. Vernon N. Houk, Atlanta; Dr. Robert R. Shaw, Dallas; and Dr. Louis Raider, Mobile.

Other program participants include: Dr. Thomas H. Allen, Birmingham; Dr. Jack Green, Mobile; Dr. Robert L. Dillenkoffer, New Orleans; and Dr. Dean B. Ellithorpe, New Orleans.

Topics for discussion include segmental resections, pulmonary angiograms, chest trauma, and middle lobe syndrome.

Further information and advance reservations can be made by contacting Mississippi Thoracic Society, P. O. Box 9865, Northside Station, Jackson, Miss. 39206.

UMC Announces New Appointments

Seven new appointments went into effect at the University of Mississippi School of Medicine in December. Two pathologists at the Jackson Veteran's Administration Hospital have received faculty appointments as assistant professors of pathology, Dr. Lloyd L. Barta and Dr. Ezatollah Foroughi.

Dr. Barta, who received his M.D. degree from the University of Nebraska School of Medicine, was an intern at McCook Memorial Hospital and a resident at New Orleans Charity Hospital. He is acting chief of laboratory service at the V.A. Hospital.

Dr. Foroughi, holding an M.D. degree from Teheran University Medical School in Iran, served his internship at Mercy-Timken-Mercy Hospital and residencies at Kansas University Medical Center, St. Luke's Hospital and New England Deaconess Hospital.

Instructors joining the faculty are Miss Vicki G. Hendershot, instructor in surgery (otolaryngology); Dr. Krishna Potnis, instructor in obstetrics-gynecology; and Edward Eugene Thompson, clinical instructor in surgery (otolaryngology).

Miss Constance Juzwiak and Miss Carol June Smith are both new associates in obstetrics-gynecology, in connection with the nurse-midwifery program.

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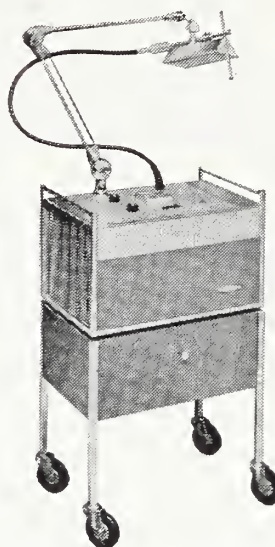
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Index to Advertisers

Arch Laboratories	51	William S. Merrell Company	44
Breon Laboratories	10A, 10B, 10C, 10D	National Drug Company	second cover, 36A, 36B
Burroughs-Wellcome	24A	New Orleans Graduate Assembly	11
Campbell Soup Company	20A	Parke Davis	40C, 40D
Geigy Pharmaceuticals	24B, 24C, 24D	Poythress	40B
Glenbrook Laboratories	8	Robins Company	20D, 33
Highland Hospital	10	Roche Laboratories	12, 46, fourth cover
Hillcrest Hospital	29	Sandoz	40A
Hynson, Westcott and Dunning	3	G. D. Searle Company	20B, 20C
Kay Surgical	51	Stuart Company	34
Lederle Laboratories	4, 31, 48	Wyeth Laboratories	6, 7
Eli Lilly	front cover, 14	Thomas Yates and Company	third cover

IN CONCLUSION

California's 1970 senate race is shaping up with all sorts of health care policy overtones. State GOP is said to be easing out conservative Sen. George Murphy who has throat tumor and can't campaign effectively. Favored to run is HEW Secretary Robert Finch instead, and Democrats will probably nominate popular president of San Francisco State College, Dr. S. I. Hayakawa, who, if elected, would be third Japanese-American in U.S. Senate.

National Medical Association, predominately black professional society, says that only 6,000 or 3 per cent of nation's M.D.'s are Negro and that two medical schools, Howard and Meharry, have graduated 83 per cent of them. More blacks are in private practice than whites (73 vs. 65 per cent), and black physicians have higher percentage of GP's. Three per cent of Mississippi's M.D.'s are black.

Alabama's Medicaid program, beginning Jan. 1, will pay physicians their usual and customary fees, while Mississippi's are held to 50th to 60th percentiles. Alabama program consists of insurance policies for physicians' services administered by Equitable Life. Blue Cross is fiscal intermediary for hospital services, and a ban will handle drug program administration.

The much-shaken Food and Drug Administration has its third commissioner in 18 months. Dr. Charles C. Edwards, former high AMA staff executive, is new commissioner, succeeding Dr. Herbert L. Ley, Jr. who lasted a year and a half after replacing the controversial Dr. James Goddard. FDA has been shoved down to low level in HEW hierarchy by Secretary Finch who is chief shaker-upper.

Nobel laureate Dr. Linus Pauling commended oranges as a therapeutic specific to the 2nd International Congress of Social Psychiatry. He said that vitamin C gives increased vigor, protection against virus and helps healing wounds, in addition to being a probable specific in schizophrenia. He reported low levels of ascorbic acid in schizophrenics where investigators discovered only one-third as much as is found in individuals of normal mental health.

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CONTENTS

ORIGINAL PAPERS

Prevention of Maternal
Rh Sensitization: Anti-Rh
Immune Globulin 53 WILLIAM B. WILSON, M.D.

Direct-Current
Cardioversion With
Diazepam as Sedative
Agent 57 WILLIAM H. ROSENBLATT,
M.D., and DEXTER C.
NETTLES, M.D.

SPECIAL ARTICLES

Guidelines to Increase
Efficiency of the Hospital
Emergency Department 61 JOHN T. MILAM, M.D.

Radiologic Seminar XCII:
Subclavian Steal Syndrome 66 T. S. MCCAY, M.D.

EDITORIALS

Medicredit: Delivery System
in AMA's Image 69 Done With Taxes
Additives: HEW, FDA,
MSG, LD₅₀ 71 Tenuous Conclusions
Data Show Appendectomy
Is Safe 71 Figures in Our Favor
The Agony and the
Ecstasy of Taxes 72 Watch the Small Print
Work and Play OTV
Can Be Dangerous 73 Snowmobile Menace

THIS MONTH

The President Speaking 68 Best Part of the Job
Medical Organization 79 Formal Opening of New
Headquarters Addition

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AMA Names Private Practice Committee

Dr. W. B. Hildebrand of Menasha, Wis., has been elected chairman of the American Medical Association's Committee on Private Practice during its organizational meeting at Chicago.

The committee, a component of AMA's Council on Medical Service, was created by the House of Delegates at its recent clinical convention in Denver.

A former president of the American Academy of General Practice, Dr. Hildebrand has been a member of the Council since 1968. He is also an AMA Commissioner to the Joint Commission on the Accreditation of Hospitals. From 1960-64 Dr. Hildebrand served as a member of AMA's Commission on the Cost of Medical Care.

Vice-chairman of the new Committee is Dr. Robert E. Tschantz, of Canton, Ohio.

Other members are: Drs. C. Willard Camalier,

Jr., Washington, D. C.; Burns A. Dobbins, Fort Lauderdale, Fla.; Frank H. Green, Rushville, Ind.; Warren A. Lapp, Brooklyn, N. Y.; Clinton S. McGill, Portland, Ore.

Also, Drs. John G. Morrison, San Leandro, Calif.; Tom E. Nesbitt, Nashville, Tenn.; Andrew L. Thomas, Chicago; George W. Wood, III, Brewer, Maine.

The committee was the final outgrowth of a planning and development report, and the initial recommendation was for a Council on Private Practice. The House of Delegates, however, declined to create a new council and accorded the group committee status.

Historically, the role of the Council on Medical Service has been closely related to the private practice of medicine, and the delegates placed the committee under this parent body.

It is expected that the new committee will report to the House of Delegates through the Council on Medical Service at the Chicago annual convention next June.

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Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported, in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium and BUN during therapy, particularly in patients with suspected or confirmed renal or hepatic insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—their combined use can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to

cross the placental barrier and appear in breast milk; thus adverse reactions which have occurred in adults may occur in the fetus or newborn infant. Rarely, thrombocytopenia or pancreatitis has developed in newborn infants whose mothers had received thiazides during pregnancy. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte determinations. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Adjust dose of antihypertensive agents given concomitantly.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, altered carbohydrate metabolism, hyperbilirubinemia, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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NEWSLETTER

February 1970

Dear Doctor:

All to permit physicians to organize professional corporations for tax benefits has been introduced in 1970 session of the Legislature. Sponsored by state medical association, measure is House Bill 48 by Rep. Fred Lotterhos of Hinds. Parallel measure has been introduced by Rep. George Rogers of Warren to include attorneys.

Bid by Treasury Department to hobble professional corporations in Tax Reform Act of 1969 was beaten by AMA. So both Congress and courts have recognized validity of professional corporations. Physicians favoring bill should talk it up to legislators.

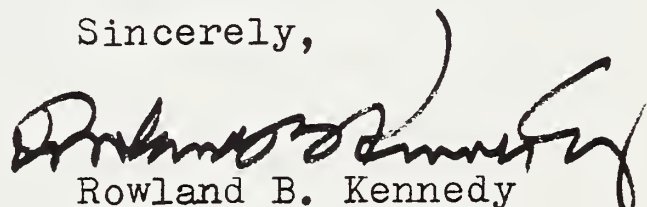
Sharp increase in Medicare Part 1-B premium to \$5.30 from \$4 is effective July 1, nearly doubling original figure of \$3 in 1966. As mentioned, however, in howls over physicians' fees is that only 26 cents of increase is earmarked for future rises in medical care charges. HEW Secretary Finch blames big increase on former HEW boss Wilbur Cohen's failing to up price two years ago.

Chiropractors are working overtime in Jackson and Washington to make chiropractic legal in Mississippi and profitable under Medicare. All to license chiropractors may be introduced at any time in Legislature. In Congress, 87 representatives from 30 states are cosponsoring bills to pay for chiropractic services under Medicare, but Mississippi Congressmen are among them.

Insurance companies and Blue plans have year of grace before having to make reports to Internal Revenue Service of payments to M.D.'s. IRS backed down and revised beginning date to Jan. 1, 1971, after which carriers and Blues must report payments of \$600 or more in any year to physicians. Rule has long been in effect for CHAMPUS, Medicare, and Medicaid.

No smoking is the word in every hospital and medical facility of U.S. Air Force, both for patients and medical personnel. Air Surgeon General, with full backing of Pentagon, prohibits patients' smoking during hospitalization and bans sale of all tobacco products in vending machines and hospital base exchanges.

Sincerely,


Rowland B. Kennedy
Executive Secretary

Today's Health Explores Sensitivity Training

"Sensitivity Training: Fad, Fraud or New Frontier" is the title of a major article in the Jan., 1970 issue of *Today's Health* magazine, the AMA publication edited primarily for non-professional readers.

However, sensitivity training is so new and experimental even physicians are often unfamiliar with its concepts, techniques and goals; yet an increasing number of patients are asking for professional evaluation.

This article, by Ted J. Rakstis, supplies many of the answers for physicians to questions they may be asked—before they are asked.

Sensitivity training comes with many other names: encounter groups, personal growth labs, T-groups ("T" for training), awareness experience confrontation groups, training laboratories, organizational development and, collectively, the human potential movement. Whatever the groups are called, the phenomenon is attracting hundreds of thousands of Americans of all ages to programs run by persons who may be either skilled professionals or rank amateurs.

The tangle of sensitivity training nomenclature suggests that not even the experts can clearly define it, the author maintains. It incorporates elements of psychiatry, sociology, philosophy, education, religion and community organization. Its practitioners number people from these and other fields; but depending upon his professional background and personal bias, each person who conducts a sensitivity group has a different focus.

Most sensitivity sessions share several common attributes, however. The programs are designed to place people in a group situation. Through a mixture of physical contact games and no-holds-barred discussions about each other's strengths and failures, each group member hopefully feels less constricted. He will become more open, readily able to understand himself and others.

The *Today's Health* article analyzes the claims of both proponents and opponents, as well as the questions of the skeptics.

The author points out the sensitivity training boom has come so quickly and assumes so many forms that most of the experts have been caught off guard. Neither the American Psychological Association nor the American Psychiatric Association has an official position.

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DATELINE

Trustees Accredited Nursing Schools Jackson - Eighteen schools of nursing in Mississippi have been accredited for 1970 by the Board of Trustees of Institutions of Higher Learning. Program includes three hospital diploma schools, four baccalaureate sources, and 11 associate degree programs. UMC, University of Southern Mississippi, Mississippi College, and William Carey College offer B.S. in nursing.

Abortion Law Held Invalid Washington - The District of Columbia abortion statute was held invalid in federal court to the extent that it prohibits procedure unless necessary for preservation of the mother's life or health." The court ruled, however, that abortion is unlawful unless performed by a competent medical practitioner. Basis of edict is denial of process and right of privacy in "removal of unwanted child."

Medicaid Will Pay for Memphis Care Memphis - Mayor Henry Loeb says that Mississippi will pay Memphis hospitals from Medicaid funds for care of its indigents admitted there. Agreement was reached recently after Memphis mayor threatened to close hospitals to Mississippi welfare patients unless state paid more than \$12.50 per day under old program. Loeb claims that per capita costs in Memphis institutions are \$65.

Podiatrists Nixed at Ohio Hospitals Youngstown, O. - An appellate court sustained an Ohio hospital in denying staff privileges to podiatrists. Suit was filed by applicant after refusal of membership and his request for surgical privileges. Hospital claimed to have acted on basis of statutory limitations on podiatrists' practice privileges. Although not on Mississippi hospital staffs, podiatrists perform major surgery in offices.

FAPA Backs Eight Hour Drink Rule Washington - The Aircraft Owners and Pilots Association, a 150,000-member group representing private aviation, has recommended adoption of federal regulation prohibiting anyone from flying an airplane within eight hours of consuming alcoholic beverages or taking drugs which would impair faculties. While airlines have long had a 24-hour nondrinking rule, there is none for private pilots. Some accidents have been attributed to alcohol.

Lilly Develops Topical Steroid

Uniform topical steroidal medication of the skin is available for the first time in a transparent plastic occlusive tape introduced by Eli Lilly and Company. The new drug formulation—Cordran® Tape (flurandrenolone tape, Lilly)—is practically invisible when in place and can be masked by applying makeup over it.

Because flurandrenolone is evenly distributed in the tape's adhesive, the same dose is applied to every square centimeter of skin treated.

Cordran Tape is indicated in the treatment of the following conditions: atopic dermatitis, contact dermatitis, eczema of hands and feet, lichen planus, lichen simplex chronicus, neurodermatitis, nummular eczema, psoriasis, seborrheic dermatitis, and stasis dermatitis. It is not satisfactory therapy for alopecia areata.

Investigators who evaluated the effectiveness of Cordran Tape in more than 2,200 clinical tests reported the response was "good" to "excellent" in nearly 70 per cent of the cases.

Impervious to moisture, the plastic tape en-

hances diffusion of medication into the skin and allows the steroid to remain effective for extended periods. The medication will not rub off, wash off, or be absorbed by the clothing as is the case with unprotected creams and ointments.

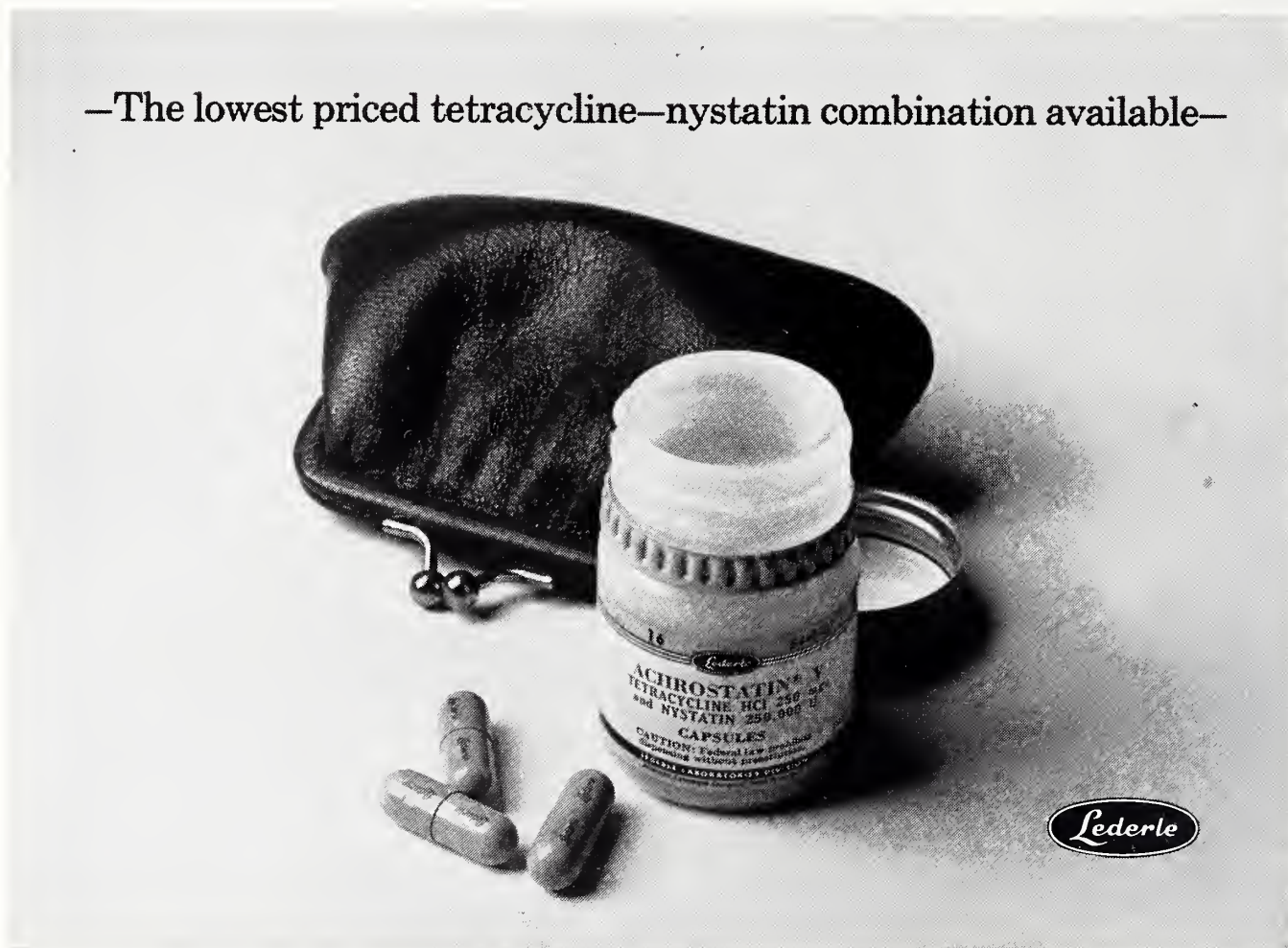
Cordran Tape also helps to protect the skin from scratching, rubbing, drying out, and irritation from handling chemicals.

The tape is made of a thin matte-finish polyethylene film which is slightly elastic, highly flexible, and acts as a mechanical splint to fissured skin. The medicated adhesive is a synthetic copolymer of acrylate ester and acrylic acid, which is free of substances of plant origin. The adhesive surface is covered with a protective paper liner to permit handling and trimming before application.

As is true of all corticosteroids, the application of Cordran Tape is contraindicated in chickenpox and vaccinia and in patients with a history of hypersensitivity to any of the product's components. Cordran Tape is not recommended for use on lesions exuding serum or in intertriginous areas, because such lesions favor bacterial growth.

Its use should be reserved for those cases of dermatoses in which its special features outweigh a possibly higher incidence of adverse reactions.

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Some degree of reaction, usually minor, was observed in 18 per cent of cases studied in the clinical trials. Most common side-effects were burning and irritation, 8.3 per cent; folliculitis, 3.8 per cent; and sensitivity reaction, 1.5 per cent. Maceration of the skin, miliaria, and drying occurred rarely. In addition, the tape may cause purpura and stripping of the epidermis. If irritation develops, the product should be discontinued and appropriate therapy instituted.

In pregnant patients use of topical steroid products (including Cordran Tape) should be avoided since their safety in such use has not been absolutely established.

Before applying Cordran Tape, the skin should be gently cleaned and dried. Scales, crusts, dried exudates, and any previously used ointments or creams should be removed. After the protective liner is peeled off, the tape is applied while the skin is under gentle tension and then is smoothed down by stroking with moderate pressure to produce tight adhesion.

In most cases, the tape should be replaced after 12 hours, unless the physician directs otherwise. When necessary, the tape may be used at night-time only and removed during the day.

In the clinical trials, 60 per cent of the pa-

tients received sufficient treatment from one roll of tape, while the requirements of 85 per cent were met by two rolls per patient.

Cordran Tape is supplied in rolls which are 7.5 cm. (3 inches) wide and 200 cm. (80 inches) long. Each square centimeter contains 4 mcg. of flurandrenolone.

Ninth Oncology Conference Scheduled

The Ninth National Conference on Therapies for Advanced Cancers will be held Aug. 20-22 (Thurs.-Sat.), 1970, at the University of Wisconsin Postgraduate Center in Madison.

The Division of Clinical Oncology, University of Wisconsin, is sponsoring the conference. The chairman is Dr. Fred J. Ansfield, Professor of Clinical Oncology.

Additional information may be obtained by writing the program coordinator: R. J. Samp, M.D., University Hospitals, Madison, Wisconsin 53706.

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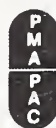
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ORIGINAL PAPERS

Prevention of Maternal Rh Sensitization: Anti-Rh Immune Globulin

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THIRTY YEARS AGO, Dr. Philip Levine, a pupil of Dr. Karl Landsteiner, became interested in a case of an unusual transfusion reaction. This had occurred in a woman of blood group O, who had received group O blood. This was, of course, thought to be compatible. Such a reaction was uncommon, but by no means rare. This woman had recently been delivered of a stillborn infant, and because of postpartum hemorrhage, had been transfused with her husband's blood. Dr. Levine demonstrated an abnormal antibody in the serum of this woman. He surmised that she might have become sensitized to an unknown blood factor in the red cells of her child, which had been inherited by the baby from the father, but which was foreign to the mother. He thought that the antibody which he demonstrated in the mother's serum was probably an antibody to this factor.

In the next two years, he recognized that these hitherto unexplainable, "intragroup" hemolytic transfusion reactions often occurred in women who had given birth to infants with the syndrome known as erythroblastosis fetalis. He postulated

that these infants' red cells contained an antigen which entered the mother's circulation and stimulated the formation of maternal antibody, which, in turn, crossed the placenta into the fetal circulation and destroyed the fetal red cells, producing the syndrome. The responsible antigen was found to be identical with the blood group, newly discovered by Landsteiner and Wiener, which they had named the Rhesus or Rh blood group.

In the early 1960s several investigators working independently of each other began research on the hypothesis that passive immunization of Rh-negative women immediately after delivery of Rh-positive infants could prevent maternal Rh sensitization. The history of study on this subject is traced, and current use of the anti-Rh immune globulin is discussed in detail.

For 50 years, it has been recognized that the administration of antibody concomitantly with antigen would prevent the antigen from stimulating antibody production in the recipient. This dates back to the work of Smith,¹ who showed, in 1909, that simultaneous administration of diphtheria toxin and antitoxin prevented the de-

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velopment of active host immunity to diphtheria. Since that time, this observation has been amply confirmed with many different antigens, and is a cardinal immunologic principle. In 1960, Finn² proposed that this principle be utilized in prevention of maternal Rh sensitization, by administration of anti-Rh antibody to Rh-negative mothers following delivery of Rh-positive infants. It was strongly suspected that an Rh-negative mother usually became sensitized to her Rh-positive infant at the time of delivery, by means of a leakage of fetal blood into the maternal circulation at the time of placental separation. Therefore, if administration of anti-Rh antibody were to succeed in preventing maternal sensitization, it would have the best opportunity of doing so, if given at the time of delivery.

Hamilton,³ in 1962, was the first to try this idea. The results were indeed impressive. He injected intravenously a high-titer antiserum into more than 500 Rh-negative women postpartum, and, of 74 who had subsequent Rh-positive pregnancies, none showed Rh sensitization.

INITIAL EFFORTS

Meanwhile, Finn and Clarke,⁴ in Liverpool, had begun work on development of a suitable antibody preparation, which they tested first in male volunteers, and then clinically, by injecting it into Rh-negative women immediately after delivery of Rh-positive infants. At about the same time, Pollack, Gorman, and Freda,⁵ working independently at Columbia University, initiated an almost identical project based on the same hypothesis; namely, that passive immunization of Rh-negative women immediately after delivery of Rh-positive infants could prevent maternal Rh sensitization. In 1966 and 1967, extensive, well-controlled, field trials were carried out in several medical centers in West Germany, Sweden, Great Britain, Canada, and America, and it was shown that practically every woman given the anti-Rh antibody within 72 hours after delivery of an Rh-positive infant was protected against development of Rh sensitization.⁴

In the combined data of these worldwide trials,⁴ of 1,886 women injected with anti-Rh antibody following their first delivery, only four subsequently showed anti-Rh antibodies, representing a failure rate of only 0.2 per cent. Of 2,006 women left uninjected, 149, or 7 per cent, developed demonstrable antibodies within a few months postpartum. However, these re-

sults were not considered the final answer, because of the possibility that some of the supposedly protected women had actually received a primary sensitization by their first pregnancy, which was nevertheless undetectable by *in vitro* antibody titration, and which might become apparent only after the stimulus of a second Rh-positive pregnancy. Fortunately, these fears were not substantiated, because, of 245 women who had been given antibody injections following each of two Rh-positive pregnancies, only one, or 0.4 per cent, became demonstrably immunized after the second pregnancy, while of 325 women who were not injected, 41, or 13 per cent, were demonstrably immunized following their second pregnancy.

IMMUNOLOGIC MECHANISM

By what immunologic mechanism does the administration of anti-Rh antibody following delivery prevent maternal Rh sensitization? The exact mechanism is not known. Mollison⁶ has suggested that passively administered antibody combines with the antigen and prevents it from combining with receptors of the same specificity on antibody-forming host cells. It has also been shown that if Rh-positive cells are coated with anti-Rh antibody before injection into Rh-negative male volunteers, the formation of immune Rh antibody is prevented.⁴ Siskind⁷ has found that passive antibody specifically suppresses an immune response, by binding to the antigenic determinants on the antigen molecule and competes with antibody-forming host cells for available antigen. Pollack et al⁸ found that passively administered antibody competed with the immunologically competent cells for antigen (or RNA-antigen complex); or possibly prevented preliminary "processing" of antigen by host macrophages. Clarke⁴ suggested that the passively administered antibody acted as a negative feedback against production of additional antibody by the host, and therefore, if exogenous antibody is administered immediately after antigen, the process of antibody formation by the host never begins.

Why is Rh antibody given only post partum, and not at some time during pregnancy when maternal sensitization might be expected to occur? The statistical data shows that almost all maternal Rh sensitization occurs as a result of transplacental hemorrhage of fetal blood into the maternal circulation at the time of placental separation, although fetal erythrocytes are demonstrable in the maternal blood stream in gradually in-

creasing numbers from six weeks' gestation until delivery.⁹ In spite of the presence of fetal erythrocytes in the maternal blood stream during most of the pregnancy, only 0.1 per cent of Rh-negative primiparas developed Rh sensitization before term, according to Pollack, Gorman, and Freda.⁵ (However, Woodrow and Donohoe¹⁰ found that 7 of 760, or 0.9 per cent, of their patients developed Rh antibodies during their first pregnancy.) Apparently, the pregnant mother has increased tolerance, poorly understood at present, for the allogeneic tissue of her infant during pregnancy, but this is rapidly lost postpartum.

Regardless of whether or not Rh antibodies are demonstrable *in vitro* in the months following the first pregnancy, this pregnancy usually serves as the primary immunization of the mother against Rh antigen, and subsequent pregnancies result in an accelerated, secondary-type antibody response.¹¹ Since it is much easier to suppress the development of a primary sensitization than a secondary sensitization by the passive administration of antibody, it is obviously of great importance that antibody be given following the first Rh-incompatible pregnancy. If an Rh-negative woman does not become sensitized by her first pregnancy, this does not mean she is less likely to become sensitized by her second, but rather her risk is the same as that of a randomly selected primipara.⁵

PROTECTIVE EFFECT

The protective effect of ABO-incompatibility between mother and fetus against maternal Rh sensitization is, of course, a well-documented, but incompletely understood, phenomenon, first noted many years ago by Levine. Although ABO-incompatible fetal cells could be "destroyed" by the naturally occurring maternal anti-A or anti-B substances, this would not necessarily render them non-antigenic.⁴ Clarke⁴ suggested that the Rh antigen of the fetal cells is acting only as a primary antigenic stimulus, while ABO antigen of the fetal cells may be acting as a secondary stimulus to the mother, and therefore the ABO antigens may produce an accelerated immune response, while the Rh antigens are unable to stimulate antibodies because of competitive inhibition. Competition between simultaneously administered antigens is, of course, a well-recognized immunologic phenomenon.

ABO-incompatibility between mother and fetus reduces the likelihood of maternal Rh sensitization by 90 per cent, but, by no means, is a

guarantee against sensitization.⁵ In the initial field trials testing the effectiveness of Rh antibody in preventing maternal Rh sensitization, only Rh-negative mothers who were compatible with their Rh-positive infants in the ABO system were utilized. This was done because these women represented the high risk group, and data on the efficacy of the treatment could be more easily obtained in this group of women, who had no complicating partial protection by ABO incompatibility. This design of these studies was not meant to imply that the investigators considered the ABO-incompatible mothers to have no risk of Rh sensitization.⁵

KLEIHAUER TEST

There has been considerable interest in attempts to utilize the Kleihauer test as a criterion of whether or not to give Rh antibody to a mother. This test demonstrates fetal red cells on the maternal blood smear by staining the smear for fetal hemoglobin, and permits accurate quantitation of the size of a transplacental hemorrhage.⁵ While the likelihood of sensitization to Rh factor bears some correlation to the number of fetal cells on the maternal blood smear postpartum (and therefore to the size of the transplacental, feto-maternal hemorrhage), the absence of demonstrable fetal cells in the maternal blood by no means offers assurance that a small, but potentially sensitizing, hemorrhage has not occurred. Different series have shown that from 15 to 50 per cent of women who subsequently become Rh sensitized had negative Kleihauer tests for fetal red cells postpartum.^{4, 5, 10} It has been suggested that women with a positive Kleihauer test postpartum may require larger doses of antibody than those with negative tests,^{4, 10} although this is probably best avoided because of the possibility of a paradoxical enhancement of the immune response.⁵

RARE EXCEPTIONS

What is the explanation for those rare cases in which anti-Rh antibody was administered postpartum in standard doses, but in which maternal sensitization nonetheless occurred? One possible explanation is that a previous, sensitizing pregnancy had occurred, ending in abortion, unrecognized by the mother and unreported to the investigators.⁴ Other possible explanations include unrecognized, very large transplacental hemorrhages, or previous, unknown, Rh-positive blood transfusion.⁴ Some of the women had received

measles immune globulin during pregnancy, which probably was contaminated with Rh antigen.⁵ Probably most failures are the result of large transplacental hemorrhages, for which the dose of antibody was inadequate. The standard dose in America is now 0.3 mg. of anti-Rh immunoglobulin G,⁵ which is sufficient for a hemorrhage up to 10 ml.—a very large hemorrhage.

Certain obstetrical factors have been shown to increase the likelihood of Rh sensitization, and these are toxemia of pregnancy, cesarean section, breech delivery, and an interval of less than one year between the first and second pregnancies.¹² Manual separation of the placenta, versions, assisted vaginal delivery, and amniocentesis are also thought to predispose to transplacental hemorrhage and result in an increased likelihood of maternal Rh sensitization.⁶

EXTENT OF USE

A pertinent question regarding the use of Rh antibody is whether to give it to all Rh-negative women who have an abortion. The exact likelihood of maternal Rh sensitization following an abortion or miscarriage has not been accurately determined statistically to date.⁵ In a fairly small series, Matthews, quoted by Clarke,⁴ found that 7 of 155 (4.8 per cent) of women having spontaneous abortion followed by curettage, had demonstrable fetal cells in their peripheral blood postpartum. Therapeutic abortion, which, of course, usually occurs later in pregnancy than spontaneous abortion, either by the vaginal or abdominal routes, resulted in much higher incidence of demonstrable fetal cells in the maternal blood; namely, about 25 per cent, with 5 per cent of these showing large numbers of fetal red cells. There is consensus among all the workers in this field^{4, 5, 10, 11} that all Rh-negative women, especially primiparas, who have an abortion, miscarriage, or ectopic pregnancy, should be given anti-Rh antibody. The only exceptions would be if the fetus is large enough for an Rh typing, and is shown to be Rh negative; or if the mother is already demonstrably sensitized, with Rh antibodies in her serum; or if it is known with certainty that the biologic father is Rh-negative.

It is evident that the proper use of anti-Rh immune globulin depends upon discovering, before 72 hours postpartum, which women are Rh-negative. In other words, adequate case-finding, within the specified time limit, is essential to the effective use of this product. Therefore, it is advocated that all women admitted for obstetrical purposes to the hospital should have an Rh type and ABO grouping routinely done on admission.¹³ This should be done by the saline-tube method, since the simpler slide method may give a false positive in pregnant women. Although many patients have had an Rh type done by their physician before delivery, a routine test on admission is considered desirable, to make sure no Rh-negative patients are missed, and also to detect possible errors in previous Rh typing. Such an error could mislead the physician into recommending anti-Rh immune globulin when it is not needed, as in a D⁺ mother mistyped as Rh-negative; or into failing to give anti-Rh immune globulin when it is needed, possibly making the physician and hospital liable, if Rh sensitization should develop in a subsequent pregnancy. ★★★

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Direct-Current Cardioversion With Diazepam as Sedative Agent

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THE REVERSION of tachyarrhythmias to regular sinus rhythm by a synchronous direct-current converter originally described by Lown¹ in 1962 and subsequently by others²⁻⁴ has now become a widely accepted procedure. Until recently most clinicians performing cardioversion used a narcotic analgesic such as meperidine in conjunction with a barbiturate,² or general anesthesia,³ or short-acting barbiturates that induced light sleep.⁴ However, these agents require the presence of an anesthesiologist. In addition, barbiturates and narcotics frequently mask subtle signs and symptoms of cardiac irregularities that may occur after conversion² and have other drawbacks and contraindications as well.

Over the past two years we have effected cardioversion in 20 patients by using a single intravenous injection of diazepam (without ancillary anesthetic measures) for producing transient sedation and amnesia.

All patients were hospitalized. One subject had thyrotoxicosis, 12 had arteriosclerotic heart disease, and 7 had rheumatic heart disease (with mitral insufficiency in 3 and mitral stenosis in 4 patients). The patients were in chronic atrial fibrillation except for 2 who had, respectively, ventricular tachycardia or atrial flutter.

In subjects undergoing elective cardioversion, digitalis was discontinued 7 to 10 days previously, and premedication with quinidine sulfate, 200 mg. every 6 hours, was started 24 hours prior to the procedure. This preparation was of necessity omitted in 1 patient (Case 19) who required emergency cardioversion.

The procedure was performed in the emergency room the morning following admission to the hospital. A preconversion electrocardiogram was recorded on a standard ECG machine connected by cable to the direct-current electrical converter. A follow-up record of the ECG was obtained during the actual conversion and immediately following application of the countershock.

A 20-case series is presented in which a single intravenous injection of diazepam used as sedative agent during direct-current countershock in 20 patients was well tolerated. Methods and materials are discussed, and results are tabulated.

Vital signs including the rate and amplitude of respiration, pulse rate and blood pressure were recorded prior to and immediately following reversion and every 15 minutes until full consciousness returned.

Undiluted diazepam (5 mg/ml) was administered slowly intravenously at a rate of 5 mg. per minute until slurring of speech was observed. The direct-current countershock was delivered immediately thereafter by the technic described by Lown¹ using an American Optical Cardioverter and anterior chest paddle electrodes.

The etiology of heart disease, age and sex of the patient, dosage of diazepam, energy of last electrical shock, and existence of complications are listed for each patient in Table 1.

All but 3 subjects reverted to regular sinus rhythm following application of direct-current countershock. The initial shock administered was

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150 watt-sec delivered in 0.0025 sec. If repeated shocks were required, each was increased by 50 watt-sec to a maximum of 400 watt-sec. The number of discharges required for reversion varied from 1 in 10 patients to 2 to 5 in 8 subjects, and 1 person received 11 immediately successive shocks before reversion to normal sinus rhythm occurred. Three patients with arteriosclerotic heart disease and atrial fibrillation failed to revert after 3 and 5 shocks, respectively (Table 1).

The usual range of dosage for diazepam was 10 to 20 mg.; 1 person received less than 10 mg.

TABLE 1
ATRIAL FIBRILLATION (N=18), ATRIAL FLUTTER (N=1) OR VENTRICULAR TACHYCARDIA (N=1)
TREATED BY DIRECT-CURRENT COUNTER-SHOCK WITH INTRAVENOUS DIAZEPAM AS SEDATIVE AGENT

Pt. No.	Age Sex	Etiology of Heart Disease	Diazepam (mg)	Number of Shocks	Last Shock (Watt-sec)	Reversion to Normal Sinus Rhythm
1	60M	ASHD	20	2	200	+
2	58M	ASHD	10	1	100	+
3	69F	RHD	20	1	100	+
4	69F	RHD	25	11	100	+
5	39F	RHD	20	2	200	+
6	39F	RHD	15	2	200	+
7	68F	RHD	10	1	200	+
8	68F	ASHD	20	5	400	-
9	60M	ASHD	20	2	200	+
10	60M	ASHD	20	1	100	+
11	58F	RHD	10	1	100	+
12	61F	ASHD	20	3	300	-
13	72F	ASHD	7	1	100	+
14	59F	ASHD	12	1	100	+
15	64M	ASHD	30	3	300	+
16	65F	RHD	10	1	150	+
17	52M	ASHD	12	1	150	+
18	56M	ASHD	16	1	150	+
19*	59M	Thyrotax	20	2	200	+
20*	61F	ASHD	10	12	400	-

* For description of complications following counter-shock (see text). ASHD = Arteriosclerotic heart disease. RHD = Rheumatic heart disease.

and 2 more than 20 mg. (25 and 30 mg. respectively). All patients, including those who were noticeably apprehensive on arrival at the emergency room, were calm and tranquil following injection of diazepam. Within one to three minutes they became drowsy or fell into light sleep

lasting 30 to 45 minutes during which they could be easily aroused when spoken to. When questioned immediately on awakening or 24 hours later, the patients usually had no recall of the cardioversion. Two subjects (receiving multiple shocks) complained of severe chest pain at the time of the delivery of the shock, but only 1 of these could later accurately recall the procedure.

NO ABNORMALITIES

Neither the rate (8 to 12 per minute) or the depth of respiration was altered by diazepam, and no hypotension or abnormal cardiac rhythm attributable to diazepam was observed.

Serious immediate complications of cardioversion in 2 patients were due to excessive digitalis. A 59-year-old man (Case 19) with thyrotoxicosis was found dead in his hospital bed the morning following cardioversion. He had been receiving large doses of digoxin which could not be safely discontinued. He had reverted to normal sinus rhythm following the second countershock, but a few minutes later bigeminal rhythm developed and persisted for several hours. A 61-year-old female (Case 20) with arteriosclerotic heart disease and atrial fibrillation had also been receiving very large doses of digitalis. She reverted to sinus rhythm following 12 successive countershocks, but about 30 minutes later bidirectional ventricular tachycardia developed and lasted 24 hours, and she relapsed into atrial fibrillation.

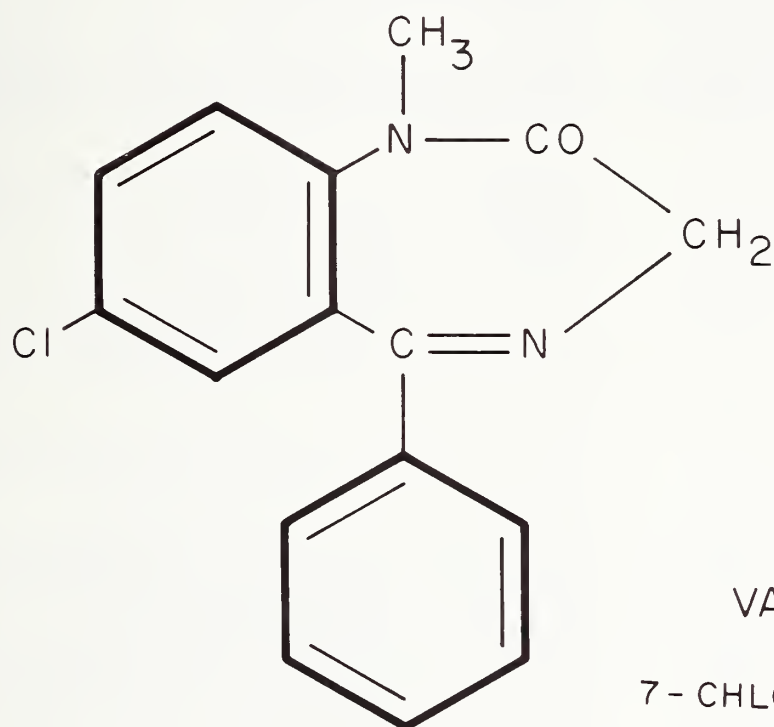
None of the other major complications described infrequently following cardioversion, such as prolonged cardiac asystole or systemic or pulmonary embolism, was observed.

USE OF SEDATIVES

Although some clinicians elect to perform cardioversion without anesthesia,⁵ most advocate the use of sedation as the discomfort in the conscious patient is generally unpredictable and may be great, varying directly with the magnitude of the electrical discharge. In addition, multiple or high energy shocks make the patient apprehensive and are particularly uncomfortable. The sensation is that of a sudden jolt or transient pressure across the chest, which has been described by patients as "feeling like someone struck me in the chest with a baseball bat," or "a sensation like a horse kicked me in the chest."

Diazepam (Valium®), a benzodiazepine derivative related to chlordiazepoxide (Figure 1), has been used extensively to reduce anxiety and tension in a wide variety of clinical situations.⁶ The drug also has central muscle relaxant and

STRUCTURAL FORMULA OF DIAZEPAM



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3H-1,4-BENZODIAZEPIN-2(1H)-ONE

Figure 1

anticonvulsant properties and is employed for the relief of muscle spasms in musculoskeletal disorders,⁷ cerebral palsy,⁸ and tetanus,⁹ and for control of convulsive seizures.¹⁰ When used as premedication in surgical and endoscopic procedures, diazepam has been reported to produce a calm, relaxed state in which the patient tends to be unconcerned with, and later has little or no recall of, the operative experience.^{10, 11} In therapeutic dosage diazepam appears to have lesser propensity to depress circulation or respiration than barbiturates or narcotics.⁹⁻¹² Circulation and respiratory responses were not altered significantly by diazepam in healthy subjects.¹³⁻¹⁵

In the present study, diazepam produced transient but adequate sedation and amnesia, thus confirming previous reports of its particular usefulness as adjunctive medication in patients undergoing cardioversion.¹⁶⁻²⁰ No clinically significant hemodynamic or respiratory changes were observed in these studies.¹⁶⁻¹⁹ and cardiac output was not reduced.²⁰

Unlike barbiturates or narcotics, diazepam relieved anxiety without producing oversedation. The period of light sleep, from which patients could be easily aroused, in our cases ranged

from 30 to 45 minutes, which is somewhat longer than that reported by Winters et al.¹⁸ and by Lown²⁰ but shorter than that observed in some instances by Kahler et al.¹⁷

Except for 1 of 2 patients who experienced severe pain following a relatively high discharge of energy, the patients had no recall of the cardioversion on awakening nor 24 hours later.

We noted no significant effects related to diazepam on cardiorespiratory parameters or autonomic functions.

ATRIAL DISORDERS

From our data and the data reported by others, it appears that in about 85 per cent of all patients atrial fibrillation and atrial flutter can be safely and effectively reverted to regular sinus rhythm by application of direct-current countershock. Digitalis-induced rhythm disorders are impervious to cardioversion. Conduction disturbances or atrial, nodal, or ventricular ectopic beats due to digitalis toxicity have been described not uncommonly following the reversion of atrial fibrillation and the restoration of normal sinus rhythm.^{1, 2} Apparently the amount of digitalis necessary to control the ventricular rate during

atrial fibrillation may cause toxic effects during normal sinus rhythm.² In most instances these disturbances disappear if digitalis is withheld prior to reversion. However, as in the two episodes of complications due to excessive digitalis observed in our series, this may not be practicable in some instances.

SUMMARY

A single intravenous injection of diazepam used as sedative agent during direct-current countershock in 20 patients was well tolerated. The drug simplified the procedure from the standpoint of obviating the use of general anesthesia, or barbiturates and narcotics. Generally 10 to 20 mg. diazepam sufficed for rapid, transient sedation and amnesia. The onset of drowsiness or light sleep occurred in one to three minutes after the injection; the patients became fully responsive in 30 to 45 minutes and usually had no recall of the countershock. In this dosage diazepam had little or no effect on respiration or circulation. Reversion by the procedure described is far safer than drug or medical cardioversion and can be readily mastered by the general practitioner.

★★★

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Guidelines to Increase Efficiency Of the Hospital Emergency Department

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Cleveland, Mississippi

A RATHER MARKED CHANGE in medical practice has taken place gradually since World War II. The use of the hospital for inpatients as well as emergency patients has rapidly increased during this interim. Housecalls have been frowned upon and gradually have become fewer. Physicians dislike coming to their offices except for regular hours, and they have become more unavailable at night, holidays, and weekends. Often when they have been called, they have referred their patient to the hospital emergency department because some doctor would be present and could take care of the situation. Therefore, because the patients' problems are no longer limited to primarily charity and injury cases, the accident room gradually has emerged into the emergency room and is now considered in the form of an emergency department. This department is where not only emergency and charity patients are treated, but also cases of colds, headaches, fever, pain and anxiety states are treated in lieu of going to the doctor's office.

The emergency department as it exists today within hospitals has become in many instances an acute problem. Multiple and complex difficulties regarding this service would include the legal implications, medical education of the house staff, public relations, physician staffing and the assurance of rendering quality medical care. These problems have become acute due to the fact that the use of the emergency room has become an area of greatly increased activity by the public. Once primarily used for the treatment of minor type emergencies such as lacerations and

simple fractures and also for the use of the charitable patient, now the emergency service is viewed by the community as a place to get general medical attention promptly, regardless of what is needed.

During the past decade the American population has expanded at an annual rate of 1½ to 2

Since World War II the old "accident room" of the hospital has developed into a community medical center for all types of care. The resulting increased use puts pressure on both the personnel and the space of today's hospitals. The author discusses the problems presented by the emergency room's new role and suggests some solutions.

per cent. During this same period visits to the emergency departments have increased at a rate of approximately 6 per cent per year. To handle efficiently this rapidly increasing number of patients, hospitals must first accept the existence of this dramatic change that has and will continue to have profound impact upon health care throughout the country. The American College of Surgeons after several years of study published in 1963 an excellent comprehensive article on "Standards for Emergency Departments in Hospitals." One part of the article states in effect that it should be the policy and function of the general hospital to make adequate appraisal and to render necessary initial care to anyone who presents himself at the emergency area. Every person within the health care field—physician, hospital administrator, or health economist—must be-

Read before the 92nd semi-annual meeting, the Delta Medical Society, Indianola, October 8, 1969.

HOSPITAL EFFICIENCY / Milam

come vitally concerned with the rapidly increasing number of emergency department visits by patients. Failure to properly handle this problem will have a most unfortunate and negative impact on community relations with the hospitals.

There are three primary causes for the increased use of emergency departments. One is that the hospital has become a center for casual medical care. Private medicine appears to be developing into a system of formal appointment and referral type of medical practice. The more informal nonappointment casual type of practice which is ever increasing has been relinquished to the institutions. Therefore, the hospital emergency department has become the center for supermarket medicine in many areas.

INCREASED USAGE

A second cause is the significant change in the total capacities of medicine. Thirty years ago the individual physician with his symbolic black bag had a far greater capacity to bring to the patient all of what was then medical science than he has today. He was considered at that time to be an independent self-sufficient unit. Today the modern physician is a part of a complex multidisciplinary team of professional, semi-professional and technical personnel. He may be considered a prism through which all the resources of modern medicine are focused onto one individual's needs. The entire structure is obviously useless without the physician. Equally, the physician has greatly decreased capacity when separated from this great milieu of skills and facilities available to him. The center of this complex health care structure is, of course, the hospital. Here and in this type of assignment the physician can offer his patient a much greater and more beneficial range of health care than he can under any other circumstance.

A third cause of the increased number of emergency department visits is the greatly increased mobility of the population as well as the increase in birth rate and life span. Today with good methods of immediate transportation, people are no longer more or less home-bound. There usually is a car in the garage or in the neighbor's garage. As a result, a person with even a relatively simple injury is brought to the hospital emergency department which is the one place recognized by the community as a health

care area which is always available and ready at the patient's beck and call.

Increased volume and use of vehicular traffic has, of course, resulted in a substantial increase in the number of accidents, almost all of which are cared for within the emergency rooms.

POOR IMAGE

Frequently hospitals may present a poor public image rather than winning the supportive attitude which is so vital to the future of the hospital. This poor image may come about in many ways and due to many acts. For instance, the patient visiting the emergency department may have to sit in a drafty corridor along with 15 to 20 other outpatients for a considerable length of time. He may have to be cared for in facilities that have long since past their point of greatest efficiency. This naturally results in harassment to the professional and technical staff, who under the best circumstances find it difficult to keep pace with the ever increasing number of patients they are required to serve.

The patient may tend to compare his care in the emergency department with the inpatient service which he may have received some previous time. There, of course, is marked contrast in that the inpatient service is markedly immaculate, well organized, and an air of pleasantness and efficiency prevails, whereas in the emergency department the patient may feel that he is being given the "run around." He also generally views his condition as of immediate or emergency nature which it may or may not be. Any wait, however short in duration, seems to him to be intolerable.

UNAVOIDABLE INSTANCES

Of course, this waiting period is inevitable and unavoidable in many instances. The professional and technical staff constantly must attempt to sort out the patients who require the greatest attention and care in the shortest time. The waiting individual has little or no opportunity to understand this, and too frequently a harassed staff working in less than adequate facilities does not present to the patient the same kind of calm, competent attitude that he encounters as an inpatient on a nursing unit.

All of these factors create apprehension, misunderstanding, and often a negative attitude on the part of the patient towards the institution concerned.

Most hospitals in the United States undertake to furnish some type of emergency care and service and in so doing will thus assume a definite legal responsibility. The legal scope of the service is difficult to define since there are seldom any written guidelines. Quality of emergency care is apt to be determined by a number of factors including primarily the customs and practices of a community, the availability of other care, and the financial burden.

Since only a licensed physician can lawfully make a diagnosis and since a diagnosis must be obtained in order to determine whether medical care can safely be delayed by putting the patient off until the next day or referring him to his personal physician, the emergency care of a hospital should be under the direct supervision of a licensed physician. A licensed physician in charge of the emergency service or one available on call within a reasonably short period of time should be available for the emergency service at all times. Where a hospital undertakes emergency care, the governing body and the medical staff have a joint responsibility to insure adequate direction and supervision of the emergency department.

MEDICAL DECISIONS

The final decision as to whether or not an emergency exists must be in conformity with good medical practice. Injuries may result from negligent decisions regarding emergency and may lead to possible liability to either hospital or the physician or both.

If care is undertaken by the physician within the hospital emergency area, liabilities would be little to no different from that which exists with respect to regular inpatients. Liability would arise only if injury to the patient resulted from negligence in giving care or in providing adequate facility for him. This, of course, would be measured by the prevailing standard of care in the community or in similar communities under similar circumstances.

The standard emergency care in the emergency room is considered legally less rigorous than that for care of hospitalized patients. This is true because consideration is given to the circumstances under which this care is given. Also, the urgency present in the emergency case and the inability in many cases for complete preparation, complete workup and diagnosis can well explain and more or less justify unfortunate incidents which might not be excusable in the more orderly treatment of regular hospitalized patients.

Quality of care in the emergency department

may be measured by many methods. We would agree that good hospital facilities—plant and equipment—do not assure high quality of care; however, they must be considered to be of great importance. Personnel is all important in quality of care—education, experience, interest, natural ability—but there are other factors which also have a profound effect. These include availability, administration, examining rooms, equipment, personnel, standing operating procedures, triage, over-taxed facilities, records, communications, complementary inpatient services and the emergency department committee.

VISIBLE DIRECTIONS

There are many hospitals with no “emergency” or “hospital” sign visible to the public until the emergency door is reached. In this motor age, all roads leading to a hospital should have signs pointing to the facility itself and to the emergency service area. These signs should not be hidden from view by natural or man-made objects and should be visible at night. In other words, the stranger should not have to take time to ask directions in order to get to the emergency entrance.

Sufficient clerical help is necessary to obtain and to record the pertinent information pertaining to the patient. Nurses should not have to spend time writing down names, addresses and collecting money; this, of course, is a function of the business office.

The examining room should provide adequate privacy for the patient. Each area needs stretchers and wheelchairs. The equipment provided for the emergency area should be consistent with the equipment which is used in any other part of the hospital. All supplies should be marked and readily identifiable. The x-ray department and the lab should be adjacent to or at least on the same floor as the emergency area.

PERSONNEL REQUIREMENTS

Dependability and promptness of personnel are of prime importance. Attention should be given to securing or having available the correct and necessary personnel and assistants when needed. Too often the largest number of personnel are on duty on the day shift while the evening shift is usually the busiest.

Standing operative procedures, both administrative and professional should be available in every emergency department. An emergency de-

partment committee should determine policy for the facility, subject to the approval of the medical staff.

In many institutions the patient load is such that treatment priorities must be assigned. Otherwise without triage over-crowding and hasty treatment may result.

Over-taxed facilities within the emergency area must be guarded against such as inpatient procedures, pre-employment hospital physical examinations, minor surgery, re-visits, dressings. The quality of the emergency work suffers under these conditions. In many instances where this takes place multiple-injury patients brought in by ambulance have been left on stretchers for a time because no examining tables were available.

A definite system of records review is quite important in the emergency department. This type of audit should be considered to be as important as the inpatient care audit in order to help keep high quality controls.

GOOD COMMUNICATION

Good communication is necessary between the hospital emergency department and outside emergency services—police, fire, ambulance and civil defense. Unfortunately, most generally this quick communicative service is rare. Two-way radio could give important advanced notification to the emergency department staff and should be considered whenever possible.

Complementary services such as intensive care units and coronary care areas are becoming common within many hospitals. Both of these when properly administered add much to quality care. Patients can be removed to these units as soon as practical and relieve the emergency area of this often long-continued type of emergency care.

The presence of an emergency department committee made up of the chief of each of the major services, the administration and the supervising nurse of the emergency service with the function of making policies assures in many ways improved quality of care within the unit. This committee should have regular interval meetings on certain types of cases and problems which ap-

pear from time to time. With good leadership and free discussion the committee will tend to improve the care of the emergency service.

CONCLUSION

In half a generation the old "accident room," largely for "charity" and injured persons, has developed into an emergency department, the community medical center for all types of care, in all walks of life, in many places. The public looks to the hospital as the community medical center and this means that both administration and medical staff have new responsibilities in making certain that competent care with suitable supplies is furnished. Almost every institution is finding that the area occupied by its emergency service must be enlarged to cope with its increasing use.

All of the above considerations will make quality care easier within the emergency area department. No one of these will result in quality care, but when present collectively within the emergency department it is evident that the administrative and physician staff is interested and good quality care will most likely be the end result. ★★★

Cleveland Clinic Building (38732)

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 21-25, 1970, Chicago, Clinical Convention, Nov. 29-Dec. 2, 1970, Boston. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Southern Medical Association, 64th Annual Meeting, Nov. 16-19, 1970, Dallas. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

STATE AND LOCAL

Mississippi State Medical Association, 102nd Annual Session, May 11-14, 1970, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Robert P. Henderson, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday April and First Wednesday November, 2:00 p.m., Clarksdale. Walter T. Taylor, P.O. Box 1237, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. C. Hal Cleveland, P.O. Box 1018, Gulfport, Secretary.

Delta Medical Society, Second Wednesday April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando, Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday March, June, September, and December. James E. Booth, Eupora, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. M. Howell, 139 Kirkwood St., Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday January, March, June, September, and December. Donald E. Dore, Singing River Hospital, Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday March, June, September, and December. W. B. White, Medical Arts Bldg., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.

Radiologic Seminar XCII: Subclavian Steal Syndrome

T. S. McCAY, M.D.
Jackson, Mississippi

THE "SUBCLAVIAN STEAL" syndrome was first reported by Cantorini in the Italian literature in 1960. In 1961 Reivich and his co-workers wrote about this condition in the American literature. Basically, the disease is the result of stenosis or occlusion of a subclavian artery proximal to origin of the vertebral artery with reversal of blood flow in the ipsilateral vertebral artery. On the right side, occlusion of the innominate artery may produce the same condition. Lesions of the left subclavian artery are, however, more common than these of the right subclavian and innominate combined. Following development of stenosis or occlusion of these arteries, a major portion of the collateral blood supply to the affected subclavian artery may then come about by a siphoning effect from the basilar arterial circulation by way of the vertebral artery, which may lead to a variety of central nervous system ischemic symptoms.

It should be mentioned that not all patients with occlusive disease of the proximal subclavian arteries develop "steal" symptoms. While the principal source of collateral circulation in these patients is vertebrovertebral, other pathways including external carotid-vertebral, external carotid-thyrocervical, external carotid-costocervical, inferior thyroid and internal thoracic may provide sufficient blood supply around the occlusion

to reduce the drain from intracranial arterial blood supply. Furthermore, the extent of central nervous system symptoms will obviously depend upon the anatomical arrangement of the intracranial circulation, and presence or absence of intracranial atherosclerotic disease.

Symptomatology in patients with stenosis or occlusion of the proximal subclavian artery may then be related to the central nervous system, or may be that of peripheral arterial insufficiency in the involved extremity, or may be a combination of both. In a report of fourteen cases by Bryant and Spencer in 1966, seven cases had ischemic symptoms of the upper extremity only, three had vertebral-basilar insufficiency only, and four had combined symptoms. Heidrich and Bayer state: (1) 45 per cent have cerebral symptoms only; (2) 40 per cent have cerebral and arm symptoms; (3) 10 per cent have arm symptoms only; (4) 6 per cent have no symptoms.

Central nervous system symptoms in order of decreasing frequency are: (1) dizziness; (2) headache; (3) visual deficits; (4) syncope; (5) paresis of one or more extremities; (6) ataxia; (7) aphasia; (8) facial paralysis; (9) insomnia. Symptoms resulting from peripheral ischemia are, in order of decreasing frequency: (1) paresthesias; (2) weakness; (3) coldness; (4) fatigue during activity; (5) rest pain; (6) paleness or cyanosis; (7) pain during activity. The most commonly encountered physical finding is a significantly lowered blood pressure in the in-

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, St. Dominic-Jackson Memorial Hospital.

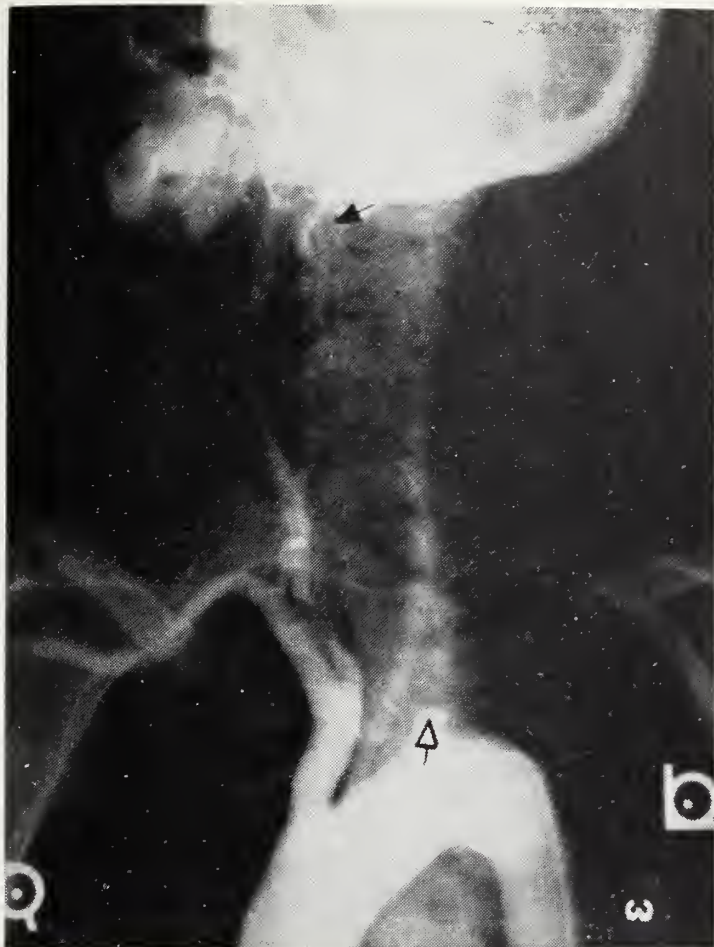


Figure 1. Film obtained 1½ seconds after beginning of injection of contrast media. Note occluded stump of left subclavian artery (open arrow), normally opacified right vertebral artery (closed arrow), and lack of opacification of left vertebral artery.

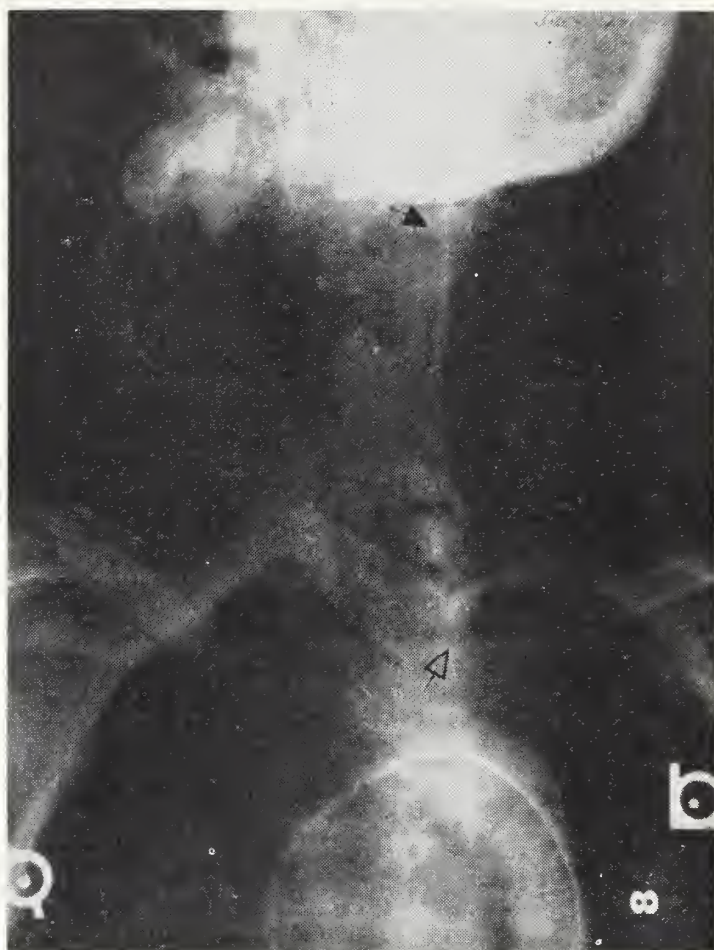


Figure 2. Film obtained 4 seconds after start of injection of contrast media. Note delayed retrograde filling of left vertebral artery (closed arrow) and delayed filling of left distal subclavian artery (open arrow).

involved extremity when the disease is unilateral. Symptoms are frequently progressive over a period of months to years.

Arteriography is the radiographic procedure employed to demonstrate the stenosed or occluded vessels, and serial films obtained following intra-arterial injection of contrast media will show retrograde opacification of the involved vertebral artery when a "steal" is present. Generally, a retrograde aortic arch study is the most suitable approach for evaluation of these cases.

The presented films are from an aortic arch study done on a patient with subclavian steal symptoms. Following pressure injection of contrast media into the aortic arch serial films were obtained at the rate of two per second. The initial films demonstrated occlusion of the left proximal subclavian artery, a normal left carotid artery, and normal right brachiocephalic arteries. Subsequent films showed retrograde opacification of the left vertebral artery with delayed filling of the left distal subclavian artery.

In conclusion, it should be stated that since

most patients with the subclavian steal syndrome are potentially curable by appropriate reconstructive vascular surgery, correct and early diagnosis is extremely important. ★★★

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The President Speaking

'Best Part of the Job'

JAMES L. ROYALS, M.D.

Jackson, Mississippi

One of the pleasures that the president of the state medical association enjoys during his term of office is visiting the component societies within the state. This has been a particularly rewarding experience. It presents the opportunity to renew old friendships, and visiting and talking with physicians in their own communities brings a deeper understanding of their problems. Many of our physicians, especially those in the smaller rural communities, face a tremendous demand for their services. It is in these areas that the shortage of physicians is most acute.

It seems only a short time ago that the four-year medical school at the University of Mississippi graduated its first class. Yet it has been highly effective in supplying well-trained physicians to our state. This is apparent everywhere one goes, and it is with pride that I observe these hundreds of young physicians meeting with excellence their responsibilities to society and rapidly becoming the leaders of medicine in Mississippi.

Mississippi has many problems, most of which cannot be solved immediately; but, with continued effort on the part of multiple hundreds of dedicated people, these problems will be met, and excellent medical care will be brought to all of our people. ★★★



Medicredit: Delivery System in AMA's Image

I

WITH ALL ITS WEALTH, the United States "has financial limits as to what it can undertake." These are the words of the American Medical Association spoken to the Congress in propounding its health care plan for the nation, suggesting that we will do well to maintain a realistic perspective about the bottomless pit of spending tax funds.

AMA has laid Medicredit on the table, calling it "universal in scope, voluntary in nature, and realistic in terms of total program costs." The concept is tax-related, bearing some resemblance to the idea of a negative income tax.

Medicredit would abolish Medicaid, but Medicare for those over 65 would remain and, indeed, be crocheted into the new plan. The indigent would have the same coverage as the well-heeled who participated. In a nutshell, Medicredit would give the option of recovering part or all of the cost of comprehensive voluntary health insurance. The amount recoverable would relate to total tax liability.

Under the plan, you couldn't tell a pauper from a millionaire unless you saw the tax returns, and

in theory, each would receive the same high quality of services, according to AMA spokesmen. Like Shakespeare's quality of mercy, Medicredit is not strained.

II

The AMA income tax credit plan deals with tax liability, the amount owed in taxes, not in deductions, such as may now be claimed for health care expenditures. So allowable amounts for application to the purchase of health insurance or prepayment coverage comes off the tax-due total on a dollar-for-dollar basis.

The basic concept recognizes that the population of the United States may be divided into three well-defined categories with respect to health insurance purchasing power:

—Those with essentially no capacity to pay,

—Those with a capacity to pay a portion of the cost, and

—Those with a reasonably full capacity to pay.

For the first group which would include beneficiaries presently under Medicaid, the plan would provide the comprehensive coverage without expense or contribution on their part. For individuals or families with a total tax liability of

\$300 or less for any year, the program would be theirs for the asking.

A taxpayer with a liability of \$500, an intermediate range, would receive 70 per cent of the cost of his coverage, and so on up a graduated scale of diminishing government support to the individual with more than \$1,300 owed to Uncle Sam. He would get the minimum credit of 10 per cent.

The IRS would fulfill a more humane role than that in which it is ordinarily cast by issuing certificates which would be honored against health insurance or prepayment coverage costs, in cases where the taxpayer asks for one. The more affluent would simply furnish evidence of the insurance purchase and take the difference off the check submitted with the return.

III

To assure uniformity in comprehensive coverage, each carrier would be registered with an appropriate agency of the state. The contents of the insurance package, the range of benefits, would have to pass muster before the state agency and would include three parts:

—Part I would furnish a minimum of 60 days of inpatient hospital services, paid in full after an initial deductible of \$50. Emergency room and outpatient services would be paid at a rate of 80 per cent through the first \$500.

—Part II would furnish medical services wherever and whenever needed, payable at 80 per cent through the first \$500.

—Part III, a supplemental and optional portion, would provide prescription drugs with a \$50 annual deductible, additional days of hospital care with a 20 per cent co-pay clause, cost of blood in excess of three pints, and other personal health services on written orders of a physician, also under a 20 per cent patient co-pay requirement.

Under the proposed plan, a carrier is defined as a voluntary association, corporation, partnership, or other nongovernmental organization which offers a health benefits insurance plan. The entire program would be supervised by an 11-member Health Insurance Advisory Board made up of the Secretary of HEW, the Commissioner of IRS, and nine public members. This body would set standards for quality, establish guides for state insurance departments in registering carriers, and work out utilization review minimums.

IV

Among the widely varying ideas advanced by equally varying colors of philosophy, all who would remake the care delivery system in their own image seem to agree on the utter necessity for the insurance mechanism. Without the insurance companies, the Blue plans, and state medical associations, almost no public care program could or would be successful. AMA says that Medicare would "have been an administrative shambles" without the carriers and Blues.

This clearly implies, as the AMA asserts, that there must be a strengthening and further involvement of the private sector in all care programs. Medcredit as introduced by AMA is a basic concept which envisions further refinements, extensions, improvement, and innovations, but not on a crash basis.

The socioeconomic side of health care has been nearly ripped to shreds by radical replacement, rapid innovation, and sudden shift of financial responsibility during the past two decades. AMA says that Medcredit would halt this senseless rush to confusion by providing a basis for orderly, logical development. "The shortcomings of our system, whatever they may be," AMA



"Eight million and one . . . eight million and two . . . eight million and . . ."

declares, "stem from the rapid relatively uncontrolled growth of medical technology, the staggering increase in demand, and the American compulsion to experiment, innovate, and improvise in an atmosphere of freedom of enterprise and competition in the marketplace."

Not everybody will agree that Medicredit is the answer or even the appropriate direction. But most understand that one way or another, the decade of the 70's may well witness a national health program. To this extent, it is pertinent that medical organization is in the forefront with a credible proposal, however presently imperfect.

Within the decade, every level of medical organization will address itself to the crucial issue of the shape and form of the delivery system as they must. Or it will be remade in somebody else's image.—R.B.K.

Additives: HEW, FDA, MSG, LD₅₀

Total immunity from the hazards of our environment would be most desirable, but it is an unattainable ideal. This to say that there simply cannot be fatality-free transportation, accident-free homes, or absolutely harmless effects of what we eat and drink. But fervent pursuit of this goal is implicit in the recent findings and edicts of the FDA and HEW.

Within the past few months, we have had the flaps over cyclamates, monosodium glutamate, and most recently, paprika in meat. Now, this is the job of FDA, and time was at the turn of the century when our foods and potables were something less than 99.44 per cent pure.

But questions are being raised by reputable scientists as to methodology employed in reaching some of the conclusions as to the dangers of food additives. So great has the gap become that FDA has been shaken up from top to bottom, and it is no secret that the recently removed commissioner, Dr. Herbert Ley, disagreed with his superiors in HEW over the monosodium glutamate issue.

A few have even gone so far as to say that experimental doses of additives in laboratory animals, say in the case of the cyclamates which were the equivalent of an adult's drinking 700 cyclamate-sweetened soft drinks in one day, really doesn't prove the point.

In the instance of MSG, the acute oral LD₅₀

in rats was 13.3 to 19.9 g/Kg, admittedly a good bit more than we use in the clam chowder. Other toxicity tests in lab animals for MSG consisted of injections.

Any scientist can assert that we know little enough about how our food, drink, drugs, and water affect us. Yet, the whole of mankind is doing pretty well in expanded numbers and longevity. The search for truth in this critical area must be no less objective and rational than the search for truth elsewhere. Above all, there must be no political capital made from a tenuous or even improbable conclusion.

It seems only logical to foster diversified research and scientific colloquy on the additives, because if these work for nuclear physics, the same techniques will also work for flavor enhancers in our hamburgers. And it is an unnecessary postscript to observe that legally sold and taxed tobacco is a little more toxic than a few grams of artificial sweetener. Don't we really need to realign these perspectives?—R.B.K.

Data Show Appendectomy Is Safe

Nobody argues that appendicitis isn't a serious surgical condition, but removal of the offending, diseased tissue has become a pretty safe procedure. Actuaries of the Metropolitan Life Insurance Co. have reported detailed studies of appendicitis made for the decade 1956-66 and a special study for 1967. Results are impressive.

The mortality rate for appendicitis in 1967 was 0.8 per 100,000 which is figuratively about as safe as taking aspirin. In that year, there were 1,500 deaths resulting from the condition, but a majority of the fatalities occurred after the onset of peritonitis or perforation. In fact, the greater the age, the higher the mortality, bringing into the picture what every physician knows: The greater frequency of complications resulting from chronic cardiovascular, respiratory, and digestive system disorders.

Female patients undergoing appendectomy enjoy a lower mortality rate and shorter hospital stays than male patients, but women have a higher incidence of surgery. The rate is 1.9 per 1,000 females against 1.5 per 1,000 males. On a basis of deaths per 100,000 cases, the female mortality rate was 0.6, while the rate for males hit 1.0, still a most favorable figure.

A study of hospitals in Virginia during 1956-60 showed that 19 deaths from appendicitis occurred, and all but one were in the group where perforation had occurred prior to admission.

Nine out of 10 patients admitted for appendicitis undergo surgery, the study says, and the mean hospital stay was 6.5 days. This breaks out to means of 7.2 days for males and 5.8 days for females. Incidence of the condition is almost twice as high among the age group 17-24 and lowest in the 45-64 bracket. Incidence drops down to an almost insignificant 0.4 per 100,000 for women over age 45. Average duration of illness, combining time in the hospital and convalescence, was 34.0 days for males and 37.9 days for females. The youngsters under age 24 were ill for only a little over three weeks.

The progressively better experience reflected in the study underscores concomitant advances in surgical technique and anesthesia, the growing effectiveness of antibiotics, and better hospital care.—R.B.K.

The Agony and the Ecstasy of Taxes

The Tax Reform and Relief Act of 1969 affects physicians, their practice organization, and medical societies in many ways. In a touch and go situation, President Nixon figuratively held his nose and signed the act into law, realizing as any astute politician would that he didn't have the votes in Congress to sustain his veto.

The AMA-supported Fannin Amendment knocked out the provision that no individual could realize more benefit under a professional corporation than he could under Keogh which, in reality, extends the tenuous life of professional corporations for a year. But professional corporations organized under Subchapter S of the Internal Revenue Code (which are taxed in a manner similar to partnerships) are bound to limits of Keogh or \$2,500 per year per participant. This limitation applies to tax years beginning in 1970.

Retirement benefits under Social Security are increased 15 per cent without change in the tax rate. The latter is rhetorical, however, since the existing escalation timetable was built into the law in 1965. In brief, taxation was already there for the so-called increase.

If you own an oil well, there's bad news, what with the mineral depletion allowance reduced to 22 per cent from the historic 27.5 per cent level. Availability of the 25 per cent capital gains advantage has been drastically reduced, but you'll still have to hang onto eligible assets for six months before selling to avoid taxation as regular income.

By 1973, personal exemptions will get a \$750 credit over the present \$600, and for the Texas rich, you can now give charity up to 50 per cent of adjusted gross income. The surcharge is slashed by half to 5 per cent and will be wiped out altogether with fiscal 1971.

Mandatory reporting of payments to physicians of \$600 or more annually by health insurance carriers and Blue Shield was deleted, but IRS has issued regulations requiring such reporting. Generally, insurance companies and the Blue plans have ignored this requirement which has actually been a regulation under the Internal Revenue Code since 1954.

Unrelated income of tax-exempt organizations will be taxed, meaning that AMA and all state medical associations will pay federal taxes on medical journal advertising. This will clobber



"I'm putting you on this vegetable diet because 'man cannot live by bread alone.'"

AMA which already has \$4 million in "back taxes" pending.

The tax bill is a sort of garbled step toward equity, but by no means does it achieve it. The net result is a tax revenue loss. In the meanwhile, every individual and corporate tax situation must be carefully re-examined, because if the big print gives it to you, there may be some fine print to take it away.—R.B.K.

Work and Play OTV Can Be Dangerous

We Southerners sometimes get the feeling that everything which can happen to us eventually does, but there is one growing problem—medical, legal, and economic—which we will not likely face: The menace of the snowmobile, most popular of the new generation of overland terrain vehicles.

The OTV is just about the newest transportation form on the American scene. It is part of the family of dune buggies, swamp buggies, and the all-purpose OTV we are beginning to see in the South, the pint-sized rowboat with six over-size, low-pressure tires. The snowmobile is a small, heavy affair, usually seating two persons in tandem, with skis forward and a chain track at the rear for driving power. It is about as close to a motorcycle as you can get with snow.

The snowmobile has become extremely popular for work and play in a short time. There are 100,000 of the powerful, fast bugs in Michigan, and estimates are that some 600,000 have been purchased in the northeast and Canadian border states. About 25 companies make them, and they say that the boom is just beginning. Sales to date have been made mainly in small towns and rural areas.

The American Mutual Insurance Alliance reports that the go-anywhere-in-snow capability of the noisy bugs harasses farmers besides breaking down fences. Snowmobile looters have ransacked closed resort cabins, and northern railroads complain of the fast vehicles using space between rails with expected resulting fatal collisions with trains.

U. S. Customs officials say that snowmobiling Canadians ignore official entry points as they zip across the border to bars and restaurants on the American side. Conservationists are concerned about snowmobile pursuit of game which is dooming the preserves.

But toll of human life is the big problem. The

most frequent fatal accident is crashing through thin ice with drowning. Second most fatal mishap is striking fixed objects. Alcohol-charged snowmobilers are as much of a menace off the road as the drunk driver is on the highways, taking into consideration the variation in traffic density for the two types of transportation.

Insurance claims from snowmobile accidents are resulting in higher premiums for nearly all casualty coverage where the bugs abound. There is a challenge for safety and common sense in the picture, because the vehicle has great potential for work and recreation. But take comfort: You will not be rammed by a reckless snowmobile driver as you go home tonight in the sunny South.—R.B.K.



POSTGRADUATE CALENDAR

February 11, 1970

SEMINAR ON LOW BACK PAIN

University Medical Center, Jackson
February 11, 1970, beginning at 8:30 a.m.

Sponsored by The University of Mississippi School of Medicine Postgraduate Education Committee, the Department of Medicine and the Department of Surgery, Division of Orthopedics, with the support of the Vocational Rehabilitation Services Administration, U. S. Department of Health, Education and Welfare

Participants:

Stewart Agras, M.D., professor of psychiatry and chairman of the department, The University of Mississippi School of Medicine

Hanes H. Brindley, M.D., Temple, Texas

Robert Currier, M.D., professor of medicine, The University of Mississippi School of Medicine

James D. Hardy, M.D., professor of surgery and chairman of the department, The University of Mississippi School of Medicine

Bernard S. Patrick, M.D., associate professor of neurosurgery, The University of Mississippi School of Medicine

Joseph N. Schaeffer, M.D., professor of physical medicine and rehabilitation and chairman of the department, Wayne State University School of Medicine, and director, Rehabilitation Institute, Detroit, Michigan

POSTGRADUATE / Continued

Henry A. Thiede, M.D., professor of obstetrics and gynecology and chairman of the department, The University of Mississippi School of Medicine

W. Lamar Weems, M.D., associate professor of surgery and chief, division of urology, The University of Mississippi School of Medicine

Wednesday Morning

ANATOMY OF THE LOW BACK

Dr. Brindley

AS THE GYNECOLOGIST SEES IT

Dr. Thiede

THE VIEW OF THE UROLOGIST

Dr. Weems

THE GENERAL SURGEON'S CONCERN

Dr. Hardy

THE NEUROSURGEON'S APPROACH

Dr. Patrick

Wednesday Afternoon

PHYSICAL EXAMINATION AND ORTHOPEDIC MANAGEMENT

Dr. Currier

FROM THE PSYCHIATRIC STANDPOINT

Dr. Agras

CONSERVATIVE MANAGEMENT OF LOW BACK PAIN

Dr. Schaeffer

GENERAL DISCUSSION

March 2-6, 1970

NEPHROLOGY INTENSIVE COURSE

University Medical Center, Jackson

March 2, 3, 4, 5, 6, 1970, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Participant:

John D. Bower, M.D., assistant professor of medicine, The University of Mississippi School of Medicine, and director, artificial kidney unit, The University of Mississippi Medical Center

This one-week intensive course, the sixth in the 1969-70 series, is a clinically-oriented course emphasizing the reversible and treatable forms of kidney disease. The manage-

ment of acute kidney failure will be presented in depth. The management of pyelonephritis, fluid and electrolyte problems, and acid base balance will also be covered and the participants will become familiar with hemodialysis in clinical radiology. Registration is limited to five state physicians from the class of 20 enrolled in the Mississippi Postgraduate Institute in the Medical Sciences.

CIRCUIT COURSES

SOUTHERN CIRCUIT

HATTIESBURG—February 5—Session 2

Forrest General Hospital, 6:30 p.m.

LAUREL—March 12—Session 3

Laurel Country Club, 6:30 p.m.

GULFPORT—February 4—Session 2

Gulfport Memorial Hospital, 6:30 p.m.

BILOXI—March 4—Session 3

Bay-Waveland Yacht Club, 6:30 p.m.

Session 2—Diagnosis and Management of
Malignant Skin Lesions

Dermatologic Approach, Dr. James G.
Thompson

Surgical Approach, Dr. James H. Hendrix

Session 3—Current Approach to Tetanus
Prophylaxis and Treatment, Dr. Ray-
mond Martin

Diagnosis and Management of Hyper-
thyroidism, Dr. J. Manning Hudson

EASTERN CIRCUIT

COLUMBUS—February 24—Session 2

Lowndes General Hospital, 6:30 p.m.

Session 2—Respiratory Failure: Current
Methods of Management, Dr. Boyd
Shaw

Surgical Management of Emphysema, Dr.
William Fain

MERIDIAN—March 3—Session 1

Northwood Country Club, 6:30 p.m.

Session 1—Carcinoma of the Cervix

Radiologic Approach, Dr. Bernard Hick-
man

Surgical Approach, Dr. Richard Boronow

SOUTHWESTERN CIRCUIT

NATCHEZ—February 17—Session 2

Jefferson Davis Memorial Hospital,
6:30 p.m.

Session 2—Hyperthyroidism

Medical Management, Dr. Herbert Lang-
ford

Surgical Management, Dr. Harvey Johns-
ton

FUTURE CALENDAR

February 4, 1970

CIRCUIT COURSE, BILOXI

February 5

CIRCUIT COURSE, HATTIESBURG

February 9-13

RADIOLOGY INTENSIVE COURSE

February 11

SEMINAR ON BACK PAIN

February 17

CIRCUIT COURSE, NATCHEZ

February 24

CIRCUIT COURSE, COLUMBUS

March 2-6

RENAL DISEASE INTENSIVE COURSE

March 4

CIRCUIT COURSE, BILOXI

March 6

RENAL DISEASE SEMINAR

March 12

CIRCUIT COURSE, HATTIESBURG

March 16-20

CARDIOLOGY INTENSIVE COURSE
STROKE INTENSIVE COURSE

April 1-3

CARDIOVASCULAR SEMINAR

April 7

CIRCUIT COURSE, McCOMB

April 16

MISSISSIPPI THORACIC SOCIETY

April 21

CIRCUIT COURSE, COLUMBUS

May 11-14

MISSISSIPPI STATE MEDICAL ASSOCIATION



PERSONALS

SPENCER BARNES of Columbus has been elected vice president of the Columbus-Lowndes Chamber of Commerce and Industrial Foundation.

JIM BARNETT and J. P. CRAWFORD and their wives of Brookhaven recently returned from the MSMA-sponsored tour to the Island of Majorca off Spain.

JAMES E. BOOTH of Eupora has been elected president of the Clarke Memorial College Alumni Association. Dr. Booth is also a trustee of this Baptist institution.

D. L. CLIPPINGER of Hazlehurst has been elevated to the presidency of the Hazlehurst Chamber of Commerce. The ceremony took place at the organization's Christmas banquet.

J. P. CULPEPPER, JR., of Hattiesburg has been named chairman of the committee on education of the Forrest County Arthritis Chapter.

MELVIN EHRLICH of Clarksdale and DURWARD BLAKEY of Jackson were participants in "Stop Measles Sunday" in Coahoma County. The two physicians immunized 2,948 children against red measles.

BEN P. FOLK, BLANCHE LOCKARD and ROBERT IRELAND, all of Jackson, were on the program of the Tenth Annual Institute of Pastoral Care of the Ill at the Mississippi Baptist Hospital in Jackson in mid-January.

HARRY C. FRYE, JR.; WARREN A. HIATT; and HENRY L. LEWIS, III of Magnolia announce the removal of their offices from Beacham Hospital to the Magnolia Clinic on Magnolia Street.

WENDELL N. GILBERT, a native of Wayne County, opened offices for the general practice of medicine in Taylorsville in January. Dr. Gilbert recently graduated from the University of Mississippi School of Medicine at Jackson and interned at St. Elizabeth Medical Center in Dayton, Ohio.

GEORGE GREEN was recently honored by the Benoit and Scott communities for his services to them over the past 22 years. The Benoit Lions Club served as host of the ceremonies during which the honoree and his wife were

PERSONALS / Continued

presented a matched set of luggage and a check for a vacation trip.

JERRY KAPLAN has been appointed to the staff of the Marshall County Hospital in Holly Springs. The surgeon holds membership on the medical staffs of Baptist, Methodist, and St. Joseph Hospitals in Memphis.

ANDY E. KIRK of Starkville is locating his offices temporarily at Felix Long Hospital. Dr. Kirk was formerly in practice with LEROY HOWELL.

STANLEY C. RUSSELL of Jackson was recently appointed Acting Chief, Psychiatry Service, at the Jackson VA Center.

RICHARD C. SCHMIDT of Biloxi has associated with the Schmidt Clinic at 137 Lameuse Street for the practice of pediatrics. Dr. Schmidt, a graduate of Tulane Medical School, is the son of Dr. and Mrs. HARRY J. SCHMIDT, SR.

FRANK K. TATUM of Tupelo has announced his retirement from the practice of medicine on the advice of his physician. Dr. Tatum has been serving as Director of the Lee-Itawamba County Health Departments and has long been active in his state association. Most recently he was elected Secretary of the Preventive Medicine Section of MSMA at the 101st annual session in May of 1969. He has also announced his resignation from this position.

ELBERT A. WHITE, III, of Corinth has *not* moved to Booneville but has established hospital privileges there at the Northeast Mississippi Hospital.

WILLIAM L. WOOD, JR., of Tupelo demonstrated the techniques of external heart and mouth to mouth resuscitation at a recent District 14 Heart Association meeting in Corinth.



DEATHS

GREEN, JAMES CLIFTON, Tupelo. M.D., Tulane University School of Medicine, New Orleans, La., 1934; postgraduate study, New Post-Graduate Hospital, 1938; died Dec. 3, 1969, age 59.

MCDUGAL, LUTHER LOVE, JR., Tupelo. M.D., Vanderbilt University School of Medicine, Nashville, Tenn., 1933; interned Vanderbilt Hospital, Nashville, one year; postgraduate work,

Williard Parker, 1934; Babies Hospital, 1934; R. I. Hospital, 1935-1937; Providence Lying-In Hospital, 1937; died Dec. 12, 1969, age 60.

SUTTLE, THOMAS CLEVELAND, Louisville. M.D., Memphis Hospital Medical College, Memphis, Tenn., 1911; interned Matty Hersee Hospital, Meridian, three months; residency, Chicago EENT Hospital, Chicago, Ill., seven months; died Dec. 18, 1969, age 84.



NEW MEMBERS

The following physician has been elected to membership by his component medical society in the Mississippi State Medical Association and the American Medical Association.

CHAVEZ, CARLOS MANUEL, Jackson. Born Lima, Peru, Dec. 25, 1932; M.D., San Fernando Faculty of Medicine, Lima, Peru, 1956; interned Hospital Regional de Tacna, Lima, Peru, one year; vascular surgery residency, Massachusetts General Hospital, Boston, 1960-61; cardiovascular surgery residency, Methodist Hospital, Houston, Texas, 1961-62; cardiovascular surgery fellowship, University Medical Center, Jackson, Miss., 1963-64; general surgery senior resident, University Medical Center, Jackson, Miss., 1964-65; Hektoen Medal (AMA) awardee; assistant professor of surgery, UMC; elected Sept. 2, 1969 by Central Medical Society.



LETTERS

SIRS: It was my pleasure and good fortune to have the privilege of attending a seminar concerning rubella at Mississippi State University recently.

Dr. Louis Z. Cooper's presentation was the most practical and understandable lecture it has been my privilege to hear. In Mississippi we spend thousands of dollars to care for individuals who have preventable defects but a negligible amount to determine the susceptibles and protect them, thereby protecting their offspring from these preventable causes—rubella being one of the most serious.

H. C. RICKS, M.D., MEMBER
MISS. STATE BOARD OF HEALTH
JACKSON, MISS. 39205



Book Reviews

Introduction to Medical Science. By Clara Gene Young and James D. Barger, M.D. 275 pages with illustration and appendix. St. Louis: The C. V. Mosby Company, 1969. \$7.95.

The present use and the advocated greater utilization of paramedical personnel in the care of the sick and injured has prompted the authors, one a medical writer and the other a practicing pathologist, to write a volume to fill in the gaps in knowledge about the causes of diseases and their effects on individual organs and the body as a whole.

The first chapter is devoted to an introduction which along with the preface not only explains the reason for the book, but also relates instruction on the use of the volume and what to look for in one's search for knowledge about diseases.

The style of preparation is designed so that the reader can be a self teacher. Chapters two through fifteen are written to include a step-by-step method of self examination. These chapters are devoted to basic concepts of disease causative factors. This, in fact, emphasizes the title of the book, *Introduction to Medical Science*.

In order to understand diseases the authors take the reader or student through the answers to the following questions: Is it an inflammation, allergy, trauma, tumor, congenital defect, mechanical obstruction, circulatory disturbance, metabolic or nutritional disorder, or the result of infection?

In each of the chapters referred to above the format includes representative diseases under each heading. However, in the make-up of the remaining chapters the style is changed and the content is restricted to the selected diseases of the various anatomical and physiological systems. Needless to say, it would take a many volumed encyclopedia to catalogue and describe all the diseases with which a medical assistant might have to deal during her days of service to the doctor and his patients.

The appendix is divided into two parts: A,

the responses to the step-by-step exercises; and B, a cataloguing of infectious diseases.

My overall evaluation of the book is that it is well written, portions of which would be beneficial to medical secretaries, and the entire volume to nurse medical assistants. It is apparent from its contents that individuals who have some knowledge of anatomy and physiology would receive the most benefit from their use and study of the text. It should be useful in courses designed to train medical assistants.

RICHARD G. BURMAN, M.D.

Physiology of the Gastrointestinal Tract. By E. Clinton Texter, Jr., et al. 262 pages with 106 illustrations. St. Louis: The C. V. Mosby Company, 1968. \$10.75.

This easily readable small book is well edited and attempts to delineate the areas of physiologic knowledge most relevant to medical practice. The author covers the subject under four major headings: splanchnic circulation, motor mechanism, secretion, and absorption. Most of the material is presented and discussed in a clear manner. There are, however, rather confusing sections for a book directed to medical students as its author claims.

The chapter on gastrointestinal motility is well covered and up-to-date, but too much emphasis is given to some aspects. For example, the section of "electrical phenomena at the level of the cell membrane" is very difficult to understand without previous knowledge of physics and mathematics. Some other aspects very relevant to gastrointestinal physiology are practically neglected, such as liver physiology; perhaps because it is a very large subject to be considered in a small book such as this.

Although there are some negative aspects in this book, the overall evaluation is positive. It is a useful addition to the few already in existence covering the difficult problems in gastrointestinal physiology. The references are good and up-to-date.

LIDIO O. MORA, M.D.

Baptist Hospital Elects 1970 Officers

Dr. Noel C. Womack, Jr., has been elected president of the Medical Staff of Mississippi Baptist Hospital of Jackson for the calendar year 1970. He succeeds Dr. James M. Packer.

President-elect for 1970 is Dr. Albert L. Meena, who served as vice president of the staff in 1969.

The new vice president is Dr. Robert P. Henderson, who served in 1969 as a member of both the Isotope Committee and the Utilization Review Committee.

Secretary of the Medical Staff for 1970 is Dr. H. C. Ethridge, a member of the Tissue Committee, who succeeds Dr. William S. Cook.

MSBH Warns About Animal Bites, Rabies

Certain important points regarding bites by non-domestic animals should be reviewed. Each animal bite situation must be evaluated individually regarding the need for antirabies treatment.

Any wild *carnivore* (such as the skunk, weasel, fox, coyote, raccoon, bobcat, or badger) and certain other species, such as the bat, may harbor rabies. The danger of keeping wild carnivores as pets should be emphasized; particularly young animals since they are susceptible to rabies and could have acquired it from the mother who died of the disease. Bites by these species must be considered a rabies exposure until proven otherwise. Clinical signs of rabies in some species of wild animals, such as bats, may not be reliable and, therefore, instead of being held for observation, the animal should be killed at once and the brain examined, using the fluorescent rabies antibody (FRA) test. On the other hand, bites of rodents, including gophers, squirrels, chipmunks, rats, mice, hamsters, and guinea pigs rarely, if ever, call for specific rabies prophylaxis. Unwarranted treatment must be avoided just as stringently as indicated treatment should be given.

Immediate and thorough cleansing of bite wounds is the most important preventive measure. Following this, combined treatment with

rabies vaccine and anti-rabies hyperimmune serum is recommended as soon as possible for (1) *All exposures* classified as severe (head, neck, face or finger bites; puncture wounds; multiple bites); (2) *All Bites* by *rabid* wild animals (combined treatment even for *mild* exposures by domestic carnivores may also be used, and is recommended by some authorities); (3) *All Bites* by wild carnivores and bats *suspected* (unprovoked attack, abnormal behavior) of being rabid pending results of laboratory tests. If the FRA test is negative, vaccine treatment should then be discontinued. When indicated, the anti-rabies hyperimmune serum should be used regardless of the interval between exposure and initiation of treatment. It should not be assumed that it is "too late" to administer serum.

Pfizer Comments on FDA Recall

The FDA has announced its decision to order recalled from the market oxytetracycline capsules, produced by eight manufacturers, because of FDA's determination that those products are of questionable value medically.

While Pfizer initially provided to FDA the results of its blood level studies on a number of oxytetracycline products, and made its expertise on this important drug available to FDA, in the end it was FDA's task to conduct its own studies and to decide what action to take in this highly complicated area.

This is another scientifically documented instance which demonstrates emphatically that drugs of the same generic name are not necessarily equivalent therapeutically.

The antibiotic oxytetracycline was discovered by Pfizer in 1949, and over the years has been manufactured and distributed throughout the world under the trade name "Terramycin." Since the expiration of the Pfizer patent in 1967, oxytetracycline capsules have been manufactured and distributed in the United States by a number of other companies under the generic name, oxytetracycline, or other brand names.

Pfizer's oxytetracycline capsules, marketed under the brand name "Terramycin," are not affected by the FDA action, and remain on the market. Indeed, Pfizer's Terramycin capsules have been designated by FDA as the standard for blood levels that must be met in order for oxytetracycline products to be considered as satisfactory for certification by FDA.



Formal Opening of New Headquarters Addition Set by Trustees for Feb. 25

Formal opening of the new addition to the association's Central Office Headquarters Building has been slated for Feb. 25, according to Drs. James L. Royals of Jackson, president, and Mal S. Riddell, Jr., of Winona, chairman of the Board of Trustees. The MSMA leaders said that open house for members and guests is scheduled from 5 until 7 that evening.

Dr. Riddell, who also served as chairman of the Building Committee, said that all Trustees will be present for the occasion. Other Building Committee members are Drs. J. T. Davis of Corinth and William O. Barnett of Jackson.

"The addition fulfills a need first recognized by the House of Delegates in 1967," Dr. Royals said. "Growth of association activities and ser-

vices to our members and the public was far beyond our expectations in the decade of the 1960's, and the addition will help us fulfill this vital mission.

"Beyond this," Dr. Royals added, "the building has been a fortunate and valuable investment for the association, appreciating in value during the 14 years we have occupied it."

The construction project was reaffirmed by the House of Delegates for a second time in 1968, and last year, design was completed and bids invited just before the 101st Annual Session. The House approved the project and financing in 1969, urging that the new and needed space be provided as soon as feasible.

Also provided with the addition is vastly ex-



Final touches are added on the interior of the headquarters building addition as painters, left, finish office entrance. Right is stairwell to rear entrance opening on new and expanded parking area. Lower



level has service facilities and mail room. Open door in right photo shows part of new membership department office.

ORGANIZATION / Continued

panded off-street parking, almost triple the original area, Drs. Royals and Riddell said. The existing building has been repainted and repaired where necessary concomitantly with the new construction.

W. R. Bob Henry, A.I.A., of Jackson is the architect, and Priester Construction Co., also of Jackson, was the general contractor.

The project was begun in late spring of 1969 and completed in January 1970 on schedule. Basic construction cost was \$100,693 under the general contract.

Drs. Royals and Riddell said that the announcement constituted "a warm and cordial invitation to members of the association, their ladies, and Auxiliary members for the Feb. 18 opening and open house." Invitations are being sent to nonmedical friends of the association, including state and community leadership.

The officials said that brief ribbon-cutting ceremonies will be conducted at 5 o'clock in the afternoon on Feb. 25 after which members and guests may tour and inspect the addition and existing building. The open house will continue until 7 o'clock in the evening.

Drs. Royals and Riddell said that the Woman's Auxiliary will be furnished a permanent office in the expanded headquarters building. The decision was made by the Board of Trustees in December, they added.

Mrs. Louise C. Lehmann of Natchez, state Auxiliary president, recently inspecting the new office said that "this is the first time in our history that we have had a headquarters office of our own." She expressed satisfaction over the decision of the Board.

Progress on the project has been reported to the membership monthly in the JOURNAL. Additionally, the Building Committee and Board of Trustees have closely monitored each phase of the construction.

IRS Sends Card Explaining New 1040

Each of the 18 million taxpayers in the United States who filed the now discontinued card 1040A form last year will receive a post card explaining the change to the new consolidated 1040 form. Mr. J. G. Martin, Jr., District Director of Internal Revenue for Mississippi, said that the post card should have already been received by

the 167,000 Mississippi taxpayers who filed 1040A's last year.

In general the post card states that this year all taxpayers will receive a larger, more complete tax package which includes the one-page basic 1040 and additional pages or schedules, which may or may not be used, according to the taxpayer's needs.

Past 1040A users will find that except for a few lines, the new 1040 asks for the same information as the old card form and that they will probably not need to fill out more than one sheet to make out their returns if the standard deduction is claimed.

In the past, taxpayers who used the 1040A could not take advantage of certain tax credits or exclusions and could not itemize their deductions. A principal reason for making the change to the new form is to enable taxpayers to take full advantage of the tax benefits the law provides.

State Board of Health Commended

The State Board of Health and its employees in the state health department and the county health departments have been cited by the United States Public Health Service for "their remarkable devotion to duty throughout the health emergency created by Hurricane Camille, August 1969."

The commendation came last week when a certificate was presented to State Health Officer Hugh B. Cottrell in a special ceremony at the State Board of Health Building in Jackson.

Dr. Henry C. Huntley, Director of the Division of Emergency Health Services, U. S. Public Health Service, brought the certificate of appreciation from Washington, D. C.

Lt. Gov. Charles Sullivan made the presentation. Presiding was Dr. Frank J. Morgan, Jr., Assistant State Health Officer.

Describing as "incomprehensible" the magnitude of the disaster wrought by Camille, Lt. Gov. Sullivan told public health personnel:

"We were confronted with what could have become a very critical health situation. . . . And then you responded. You made the place safe. You provided an environment in which we could work. There is no way we could estimate the value of the contribution you made."

While the work after Hurricane Camille was "one significant occasion," said Lt. Gov. Sullivan,

"it's not really so different, because you've demonstrated your dedication over the years."

In response, Dr. Cottrell said the measure of the effectiveness of the work of the public health workers was the fact that no major epidemic was spawned in the wake of the hurricane.

The state health officer said a total of 235 nurses, sanitarians, engineers, doctors, technicians and other key personnel from the state health department and the county health departments throughout the state moved into the stricken area while many others contributed to the emergency effort in a supportive role.

Dr. Cottrell also expressed appreciation for the support the United States Public Health Service gave to the State Board of Health during the emergency operation—in both personnel and material.

Dr. Huntley, commenting on the cooperation between USPHS and the State Board of Health, said it was "one of the best examples of federal-state cooperation I'm aware of."

Drug Dependence Published By NIMH

A new publication has been inaugurated by the National Institute of Mental Health to facilitate the dissemination and exchange of information in the field of drug dependence.

The new quarterly journal, *Drug Dependence*, is prepared jointly by the Institute's Division of Narcotic Addiction and Drug Abuse and its National Clearinghouse for Mental Health Information to answer a recognized need for a professional publication in this area. The journal will serve scientists of many disciplines, legislators, lawyers, teachers, students, and others.

Drug Dependence will present abstracts, original articles by professionals in the field, and an occasional reprint to give an historical perspective to the problem of drug abuse.

Individuals or institutions involved or interested in the field of drug addiction or related areas may be placed on the mailing list for *Drug Dependence* by writing to the National Clearinghouse for Mental Health Information, National Institute of Mental Health, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

Copies of *Drug Dependence* can be purchased for 50 cents each from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

Intensive Care Unit Opens at Alabama

The very fact that the staff in the Medical Intensive Care Unit is always working under crisis conditions makes it an appealing place to work for many dedicated registered nurses.

"You have to be devoted to working with the extremely ill patient, or you just won't be able to keep up the pace," explained Miss Peggy Duke, head nurse for MICU.

The opening last month of the UAB Medical Center's new Medical Intensive Care Unit (MICU) for seriously ill patients emphasizes Alabama's need for more RN's who have specialized training.

"Nurses in units such as this learn to function in a way which is different from the traditional role of nursing," said unit director Dr. Durwood Bradley, who is also chief of staff for University of Alabama Hospitals and Clinics.

"Nurses here must learn to act independently in crisis situations, and many times they have to make effective judgments quickly," he said.

The state's newest hospital suite for intensive patient care is an eight-bed section of University Hospital's 15th floor.

In this concentrated area, highly skilled personnel utilize medicine's latest equipment for the handling of acute medical emergency developments.

Patients are selected for care in the unit on the basis of need. Once they pass the critical period of illness, they are moved into other areas of the hospital to make room for more seriously ill patients.

The unit opened soon after the adjacent Myocardial Infarction Research Unit began to accept patients with heart attacks. The two facilities share some common equipment and personnel, but the nursing staffs operate separately.

At least one resident physician is assigned to the MICU at all times.

Patients brought to MICU are acutely ill, and cases range from emphysema and respiratory failure to shock and internal bleeding.

Emphasizing the country's general need for personnel trained in the techniques of intensive care, Dr. Bradley noted, "An intensive care unit is totally dependent upon the quality of its nursing care. That makes it imperative that we continue our active involvement in the training of highly qualified nurse specialists."

John Sanders Gets Yugoslavian Fellowship

John R. Sanders, of Jackson and Greenwood, a third year medical student at the University of Mississippi School of Medicine, has been awarded one of 14 AAMC/PHS International Fellowships by the Health Services and Mental Health Administration of the U. S. Public Health Service.

Sanders, whose wife Cindy is MSMA Membership Director, will be based in Belgrade, Yugoslavia, Feb. 9-April 18, 1970.

The award is made "to provide Fellows with training in medical care techniques and health service organization unique to Yugoslavia, and thereby improve their knowledge of and familiarity with various problems of medical diagnosis and treatment, and with specific problems relating to public health, medical care, and the structure of medicine in Yugoslavia."

During the ten week fellowship, the American students will be under the direction of Professor Dr. Jovan Cekic of the Institute of Public Health, Republic of Serbia; and the Faculty of Medicine, University of Belgrade.



MSMA President James L. Royals congratulates medical student John Sanders on receiving an AAMC/PHS fellowship to Yugoslavia.

The fellowship grant includes round-trip jet fare and a stipend adequate to cover room, board, and minor expenses while in Yugoslavia.

Orientation and briefing for the medical students will be held in Washington, D. C. on Feb. 5.

The students will be exposed to the people in their homes, villages and towns. It will not be a standard clinical clerkship in a large hospital, but actual interaction with the people of Yugoslavia, commented Russell C. Mills, Ph.D., program director.

For each two U. S. medical students, there will be a Yugoslavian medical student, who has completed his fifth and last year of the medical curriculum, to act as interpreter and collaborator in contacts with patients.

Yugoslavia lies on the northwestern portion of the Balkan peninsula and is bordered by Italy, Austria, Hungary, Romania, Bulgaria, Albania, and Greece. Part of the country is a fertile plain and the rest is mountainous.

The coastal areas have hot dry summers and mild rainy winters while inland there is a moderate continental climate. Belgrade lies on approximately the same parallel as Boston.

Unlike the U. S. where doctors are in great demand, hundreds of Yugoslavian medical graduates each year are unable to find jobs.

Sanders, currently president of the junior class at UMC, is the first Mississippi student to take part in the Yugoslavian program although other UMC students have participated in AAMC fellowships to Israel and Thailand.

Florida Offers Hypertension Course

The departments of pediatrics, medicine, pathology, surgery, physiology, ophthalmology, and radiology of the University of Florida College of Medicine will hold a seminar on hypertension Feb. 27-28.

This symposium is an attempt to present a comprehensive review of the most significant new knowledge in the area of hypertension which affects nearly 17 million Americans. Special emphasis will be given to early diagnosis, treatment and the long term care of the hypertensive patient.

Dr. Irvine H. Page and Dr. Wadi N. Suki will participate as guest faculty. Other speakers will be University of Florida faculty members.

Tuition for the course is \$50.00. Inquiries should be addressed to the Division of Postgraduate Education, J. Hillis Miller Health Center, Box 758, Gainesville, Florida 32601.

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Owner Breaks Arm When Yacht Runs Aground

Schuyler, Oct. 31. Harry Waters of Covesville incurred a fractured arm when his yacht struck a large rock.

tially capsized. The fire department had to rescue Waters by small boat. Damage to the yacht is estimated at \$10,000.

Hasn't the skipper had enough excitement for one day?

For the patient who has been through an accident, the worry and anxiety following the mishap may actually heighten the perception of pain. This is why there's a classic 1/4 grain sedative dose of phenobarbital in Phenaphen with Codeine—to take the nervous "edge" off, so the rest of the formula can control the pain more effectively.

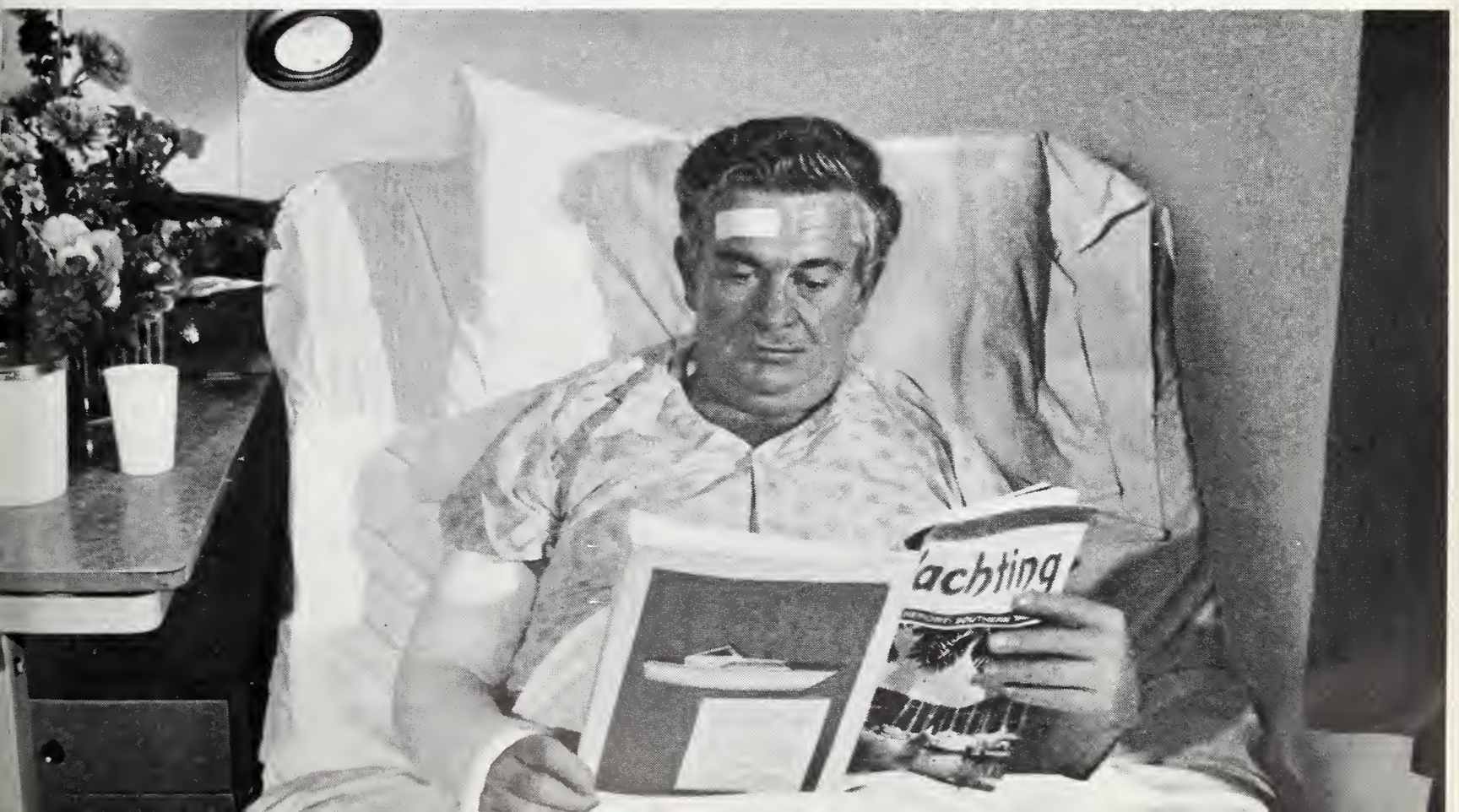
Phenaphen® with Codeine

Phenaphen with Codeine Nos. 2, 3, or 4 contains: Phenobarbital (1/4 gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2 1/2 gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, 1/4 gr. (No. 2), 1/2 gr. (No. 3), or 1 gr. (No. 4) (warning: may be habit forming).

The compound analgesic that calms instead of caffeinates

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. Contraindications: Hypersensitivity to any of the components. Precautions: As with all phenacetin-containing products excessive or prolonged use should be avoided. Side effects: Side effects are uncommon, although nausea, constipation and drowsiness may occur. Dosage: Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

H. Robins Company,
Richmond, Va. 23220 **A-H-ROBINS**



Medicare Increases Hospital Deductibles

"The overall cost of living keeps going up, and hospital costs are no exceptions," said J. G. Artz, District Manager of the Columbus, Miss. Social Security Office.

Because of the increase in the cost of the average hospital stay, social security Medicare beneficiaries will have an increase in their hospital deductibles.

Beginning Jan. 1, 1970, the social security beneficiary will pay the first \$52.00 of their hospital costs rather than \$44.00 as in the past. In the event the beneficiary stays more than 60 days, then his share of the costs will be \$13.00 per day for all days over 60 days up to 90 days. Before Jan. 1, 1970, this was \$11.00 per day.

Artz also said that Medicare beneficiaries will have to pay an increase in the extended care facility deductible. If the beneficiary is in the extended care unit more than 20 days, the new rate will be \$6.50 for the 21st through the 100th day. Before Jan. 1, this was \$5.50.

Medical Textbook on Cardiology Published

A new edition of "The Heart," a medical textbook with nearly 1,700 pages and more than 1,000 illustrations, has been published under the editorship of Drs. J. Willis Hurst and R. Bruce Logue of the Emory University School of Medicine.

The book is described as "a complete treatise of medical knowledge of the heart and blood vessels designed to bridge the gap between basic science and clinical practice. It was written to help physicians as they care for patients."

Published by McGraw-Hill Book Co., New York, the book has 103 chapters.

Dr. Hurst is professor and chairman of the department of medicine, Emory University School of Medicine, and Dr. Logue is a professor of medicine. The two physicians—widely known heart specialists—wrote much of the book in addition to serving as senior editors.

The first edition of the book appeared in 1966 and represented five years of work. The

new (second) edition is larger by more than 400 pages than the previous book and is one of the most heavily illustrated books in existence.

The new edition was written with the editorial assistance of Dr. Robert C. Schlant, professor of medicine; Dr. Nanette K. Wenger, associate professor of medicine, and Mrs. Ruth Strange, all of the department of medicine, Emory University School of Medicine.

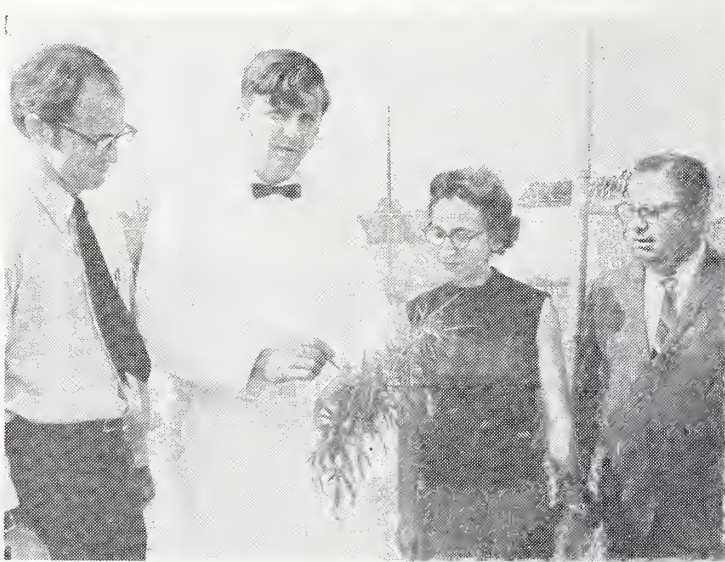
Eighty-four American and British physicians contributed articles to the book. Nineteen of these contributors were from the Emory medical school in the specialties of internal medicine, pediatrics, radiology, and surgery.

Dr. Arthur P. Richardson, dean of the Emory University School of Medicine, said of the new book:

"When the first edition appeared four years ago, it attracted national and international attention, and today this new and enlarged edition is perhaps destined to become the leading treatise on cardiovascular diseases."

The new book will be available in either one or two volumes.

Ole Miss Grows Marijuana



Dr. Norman J. Doorenbos (second from left), chairman of the department of pharmacognosy at the University of Mississippi School of Pharmacy, holds a section of locally grown marijuana which will be used in research aimed at answering questions arising from use of the drug. The Ole Miss drug garden was opened to tours this week and among visitors were Dr. Carl Sloan of Philadelphia (left), Dr. Cherie Friedman of Oxford and Dr. Charles W. Hartman (right), dean of the School of Pharmacy at Ole Miss.

Dr. L.W. Long Receives ICS Award

Dr. Lawrence W. Long, Jackson surgeon, was recently presented a bronze plaque by the International College of Surgeons. Dr. Harold O. Hallstrand of Miami, incoming president of the U. S. section, made the presentation at the banquet for installation of officers of the U. S. section in Chicago.

The plaque's inscription reads "By unanimous acclamation at our 1969 meeting we extend to you our sincere appreciation for your years of devoted and untiring service to the General Surgical Group of the International College of Surgeons." It is signed by Dr. Lowell R. Smith, chairman, General Surgical Group.

Others present at the presentation ceremony were Dr. Philip Thorek of Chicago, ICS vice president, and Dr. Mike O'Herron, outgoing president of the U. S. section, ICS.

Dr. Long is currently serving as treasurer of the college and is chairman of the publications committee of his state medical association.



Dr. Harold Hallstrand, at right, incoming president of the U. S. section, ICS, presents a bronze plaque of appreciation to Dr. Lawrence W. Long at the college's installation ceremonies in Chicago.

Miss. and La. Internists Plan Scientific Meet

Specialists in internal medicine in Mississippi and Louisiana will hold a scientific meeting Feb. 20-21, 1970 at the Broadwater Beach Hotel, Biloxi, Miss. The meeting is sponsored by the American College of Physicians (ACP).

The meeting is a regional scientific-educational meeting of the College and is aimed at helping internists practicing in these states keep informed of new developments in the basic and clinical sciences that affect their practices. A total of 39 are being held during the 1969-1970 academic year for the College's 15,000 members. The College has been holding them annually since 1930.

The meeting is under the general direction of Dr. Wesley W. Lake, Sr., Pass Christian, Miss., ACP Governor for Mississippi, assisted by Dr. A. Seldon Mann, New Orleans, La., ACP Governor for Louisiana. Dr. Lake is Assistant Clinical Professor of Medicine at Tulane University School of Medicine and Dr. Mann is Professor of Clinical Medicine at Tulane.

Mound Park Hospital Schedules Courses

The Mound Park Hospital Foundation, with the joint sponsorship of the Department of Medical Education of the Bayfront Medical Center, the University of Florida College of Medicine, Pinellas County Medical Society, and the Florida Academy of General Practice, has announced two postgraduate courses in early spring.

On April 16-18, "The Pulse of Laboratory Medicine" is scheduled. This symposium has been approved for 18 hours of credit by the American Academy of General Practice. Fee is \$100.00.

A symposium on "Pediatric and Adolescent Psychiatry" will be held May 21-23. This course has been approved for 18 accredited hours by the AAGP. Fee is \$50.00.

These courses will be completely comprehensive and designed to more fully orient practitioners in the various fields of medicine and surgery to the problems of patient care. The Foundation reserves the right to limit registration.

All classes, meetings, and clinical conferences will be held at the Tides Hotel and Bath Club, Redington Beach (St. Petersburg), Fla., and though informal, will be consistent with the highest standards of teaching practice.

The teaching faculties will be composed of selected guest lecturers and qualified staff members.

Mississippian's Children Graduate From U.T.

Judy Wheat Wood and Chad Wood, daughter-in-law and son of Dr. and Mrs. William Martin Wood of Gulfport, simultaneously received their M.D. degrees in the December graduation exercises at the University of Tennessee.

Dr. Judy Wood, formerly of Shelbyville, Tenn., is a B.A. Cum Laude graduate of Transylvania of Kentucky. Dr. Chad Wood of Gulfport is a B.A. Cum Laude graduate of the University of Mississippi.

The husband and wife team are both members of Alpha Omega Alpha, the honorary medical society. Judy served as secretary-treasurer of the graduating class. Chad received the "Outstanding Student" award presented by the U.T. department of psychiatry.

Both new physicians have six month fellowships at U.T. while awaiting internship confirmations via the matching program in March.

Dr. Chad's father graduated in the December class at U.T. 23 years ago and held the position of secretary-treasurer of the class.

Redbook Publishes New Mother's Guide

Redbook Magazine has recently published a handbook for new mothers to be used as a helpful guide during the first year of a baby's life.

"Redbook's Young Mother" is an attractively done paperback booklet containing advice and information on various phases of the maternal life. Such articles as baby's food, bathing the baby, the new mother's health, and helping baby learn to talk are included and even a few quick recipes for busy mothers are listed.

Articles are written by authorities in the various fields, including a dentist and several physicians.

A reference guide to baby's health is found at the back of the booklet and gives information on first aid, common ailments of infancy, immunization schedules and accident prevention.

The booklet is available for \$.75 from Readers' Service Bureau, P. O. Box 461, Old Chelsea Station, New York, N. Y. 10011.

1970 Directory Has Been Mailed

The 1970 *Mississippi Directory of Physicians* has been distributed to every member of the association. The mailing was completed during the first week of January, the announcement said.

The new publication is a 96-page reference source of medical licentiates in the state. It also lists career federal medical officers of the Veterans Administration and U. S. Public Health Services as well as residents and interns in AMA-accredited training institutions.

Two divisions respectively list every physician alphabetically and by county. The general alphabetical division contains addresses and ZIP codes. Membership and practice activity status is keyed for each physician listed, the announcement continued.

The association also publishes a *Monthly Directory Supplement* listing all changes of address and status, new physicians, removals, and deaths. The *Directory* is provided as a service to members and sold for \$5 per copy postpaid to others. The *Supplement* is available only on subscription for \$6 per year.

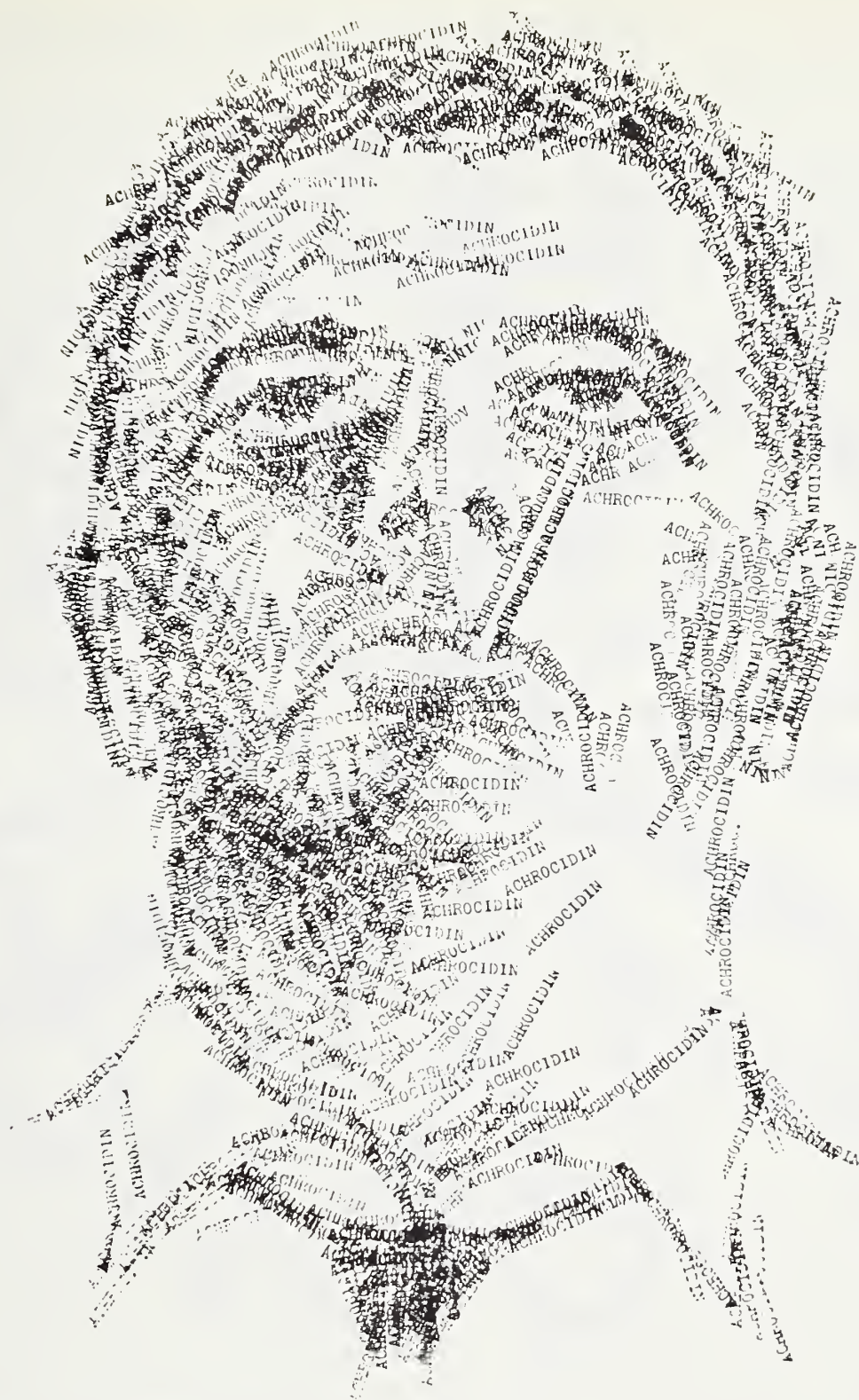
Blood Bank Association Holds Annual Meeting

The 12th annual meeting of the South Central Association of Blood Banks will be held in Houston on March 12-14, 1970, at the Rice Hotel. Any member of the medical professions, administrative or technical personnel, and others interested in blood banking are invited to register.

On Thursday morning, March 12, an Administrative Workshop will be presented. Dr. E. Richard Halden, Jr., Medical Director, Carter Blood Center, Fort Worth, will preside.

On Thursday afternoon, March 12, the SCABB Committee on Technical Workshop will present a seminar which will feature a panel of distinguished experts. Case histories will be presented by the seminar moderator and a seminar manual will be provided.

Among the outstanding speakers who will participate in the program are William Pollock, Ph.D., of Ortho Research Foundation, Raritan, New Jersey; Dr. Carlos Ehrich of the New York Blood Center; and Peter Issett of Spectra Biologicals, New York City.



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Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN[®] Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen Citrate 25 mg.

ACHROCIDIN Tetracycline HCl—Antihistamine—Analgesic Compound Tablets and Syrup are recommended for the treatment of tetracycline-sensitive bacterial infection which may complicate vasomotor rhinitis, sinusitis and other allergic diseases of the upper respiratory tract, and for the concomitant symptomatic relief of headache and nasal congestion. For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN Tetracycline equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons

on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculo-

popular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

MSBH Reports on Family Planning Project

"Acceptance of the services of the Family Planning Project has been rewarding to all the workers in the clinics," said Dr. William E. Riecken, director of a State Board of Health comprehensive family planning project in Hinds, Rankin, and Madison counties that got underway the middle of June.

Financed by a grant of \$66,000 from the Children's Bureau, the project purposes to expand the family planning program in the county health departments. The grant covers the remainder of this calendar year. An application has been made for an 18-month extension which would add Warren County.

"Cooperation among the three county health departments, the University of Mississippi Medical Center, the Community Services Association (OEO), and our project has been excellent," said Dr. Riecken.

Medical services for the clinics, currently set up at 11 different sites, are provided by eight residents in the UMC department of obstetrics and gynecology and Dr. Helen Barnes, through contact with the University Medical Center. Dr. Barnes became medical director of the project Oct. 13. With her appointment, the project staff became complete.

The supervisory nurse, who joined the project in June, is Mrs. Patricia A. Atkinson. A graduate of the Tennessee Baptist Memorial School of Nursing, she has had five years of experience as a public health nurse in Bolivar and Hinds counties and recently obtained a Bachelor of Science degree in nursing from the University of Mississippi School of Nursing.

Rounding out the project staff are two clerks and two health aides. In addition to assisting in the clinics, the aides make home visits to follow-up patients and contact clubs and neighborhood groups to spread information about the family planning program. Plans are to add an additional nurse, clerk, and health aide to the staff during the new budget period.

As soon as the Community Services Association initiates family planning services in the city of Jackson, the MSBH project will concentrate efforts chiefly on the county areas.

In order to better coordinate patient services among the local programs concerned with family

planning, Dr. Riecken said the MSBH project proposes to set up and maintain a Central Family Planning Register for Hinds County.

"A single family planning record is being developed which will have copies to be sent to each cooperating program so that a patient can be seen in any of the clinics at any time and a record of her services will be available," said Dr. Riecken.

As of Nov. 1, a total of 730 patients had been admitted to the project, 110 of which had never been in a family planning program. Approximately one third of the family planning recipients of the health department programs had changed over to the project program. After instituting family planning practices at postpartum clinics, the Hinds-Rankin Maternity and Infant Care Project refers patients to the FP Project for follow-up services.

New Orleans Graduate Medical Assembly Meets

The thirty-third annual meeting of The New Orleans Graduate Medical Assembly will be held March 2, 3, 4, 5, 1970, headquarters at The Roosevelt Hotel.

Nineteen outstanding guest speakers will participate and their presentations will be of interest to both specialists and general practitioners. The program will include fifty informative discussions on many topics of current medical interest, in addition to a clinicopathologic conference, symposia, medical motion pictures, round-table luncheons, and technical exhibits. This program is acceptable for twenty-two (22) prescribed hours and nine (9) elective hours by the American Academy of General Practice.

An interesting and enjoyable program of entertainment for visiting ladies has also been planned.

Of special interest will be a one-day pre-Assembly symposium scheduled for Sunday, March 1 on "The Price of Medical Progress" presented by noted authorities. This symposium is acceptable for six (6) prescribed hours by the American Academy of General Practice. This session will be strictly limited to physicians and their wives.

For further information, contact Secretary, Room 1538, 1430 Tulane Avenue, New Orleans, Louisiana 70112.

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Usual dosage is one tablet b.i.d.

Indications: Nutritional supplementation in conditions in which water-soluble vitamins are required prophylactically or therapeutically.

Warning: Not intended for treatment of pernicious anemia or other primary or secondary anemias. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with pernicious anemia who receive more than 0.1 mg of folic acid per day and who are inadequately treated with vitamin B₁₂.

Dosage: 1 or 2 tablets daily, as indicated by clinical need.
Available: In bottles of 100.

Business Consulting Becomes Profession

Business consulting for doctors—specialist firms concentrating on professional practice and financial management—is rapidly becoming a profession in the precise sense of the term. General business consultants have been on the scene since the early 1900's. Professional business consulting is newer, having become an identifiable profession in the 1920's and 1930's, and having grown rapidly since World War II.

The field is becoming a mature profession in four ways.

First, it is a *recognized specialty*. It is not general business consulting, where services are offered to all types of businesses. Neither is it vertically specialized, as are the law and accounting, in which a specific service is offered to all comers. Instead, professional business consultants offer a variety of expertise (from accounting to office operations to tax know-how to investment planning) to a specialized group. They know the business of managing medical and dental practices.

Second, it has developed its own *body of literature and knowledge*. This knowledge ranges from internal office procedures to setting up group practices. Much of it has been developed through the group's national organization, the Society of Professional Business Consultants (SPBC).

Third, it has its own *code of ethics*, again developed through SPBC. This code specifies the training and experience needed, requires that qualified consultants work at their profession full-time, and prohibits their acceptance of commissions from suppliers. They are truly professional advisors.

Fourth, the profession has its *own national society*, SPBC, which establishes and enforces standards of conduct, encourages the development of a literature medical-dental economics, enables members to exchange information and ideas on a professional basis.

To get more information and obtain a roster of qualified consultants in your own area, write the Society of Professional Business Consultants, 221 North LaSalle Street, Chicago, Illinois 60601.

Yale Medical School Gets \$2 Million Grant

The Commonwealth Fund has announced a grant of \$2 million to Yale University School of Medicine for a new and far-reaching attack on the effects of accidental injury—now the leading cause of death in this country in the first half of the normal life span.

The grant will enable Yale's Department of Surgery, headed by Dr. Jack W. Cole, to launch a comprehensive program to improve and reform prevailing patterns and practices for the handling of trauma victims.

The grant will also aid the construction of a major new facility—the Laboratory for Surgery and Obstetrics and Gynecology—to provide a permanent base for the trauma program and house the Department of Surgery. The Fund allocated the grant equally between the start-up costs of the trauma program and the related new facility.

In a statement announcing the grant, Quigg Newton, President of the Fund, said:

"The magnitude of accidental injury as a national health problem is underscored in a National Academy of Sciences study which revealed that in 1965 accidents killed 107,000 people in the United States, temporarily disabled ten million, and permanently impaired 400,000. Most of those killed or maimed were under thirty-seven years of age. Thus, aside from the personal tragedy involved, there was a large and irreparable loss to society in productive human talent.

"Although the toll of accidental injury continues to rise, the problem of the accident victim has not yet been approached in a comprehensive way—that is, from the total spectrum of coordinated actions, communications systems, and medical knowledge, techniques, and training required in the care of the patient from the instant of his accident through his treatment and rehabilitation.

"The essential purpose of the Yale trauma program is to pioneer in demonstrating an approach of this kind. Attainment of this objective would place Yale in the forefront of the attack on a grievously neglected national health problem. Moreover, it would exemplify the potential of university medical centers to participate with community institutions and agencies in the task of forging effective and efficient systems of health care.

Because the Yale trauma program is concentrating on the urgent need for action to improve the chances for the survival and rehabilitation of accident victims, work on accident prevention, while recognized as vital, is not being emphasized at this time. Even so, as designed by Dr. Cole, the program will be an exceptionally comprehensive effort.

The two other main components of the Yale trauma program are: (1) social science studies of injury and its consequences—for example, the role and effectiveness of social agencies in dealing with accident victims and their families; and (2) evaluation of the adequacy of the legal system in handling accident cases, particularly with respect to medical evidence.

These several efforts will be carried out by a strong inter-disciplinary team of twenty-one specialists in surgery, medicine, biochemistry, pathology, sociology, law, and such other areas as transportation and communications systems. The team will be under a program director, who will be aided by a two-man administrative staff.

More than half the three-year financing required for these faculty and staff positions, for secretarial support, and for space renovation and other needs will be provided by the \$1 million allocated by the Commonwealth Fund for the start-up costs of the trauma program.

The \$1 million of the Fund's grant allocated for the construction of the new building which will house the trauma program and the Department of Surgery becomes payable as soon as this part of the grant, combined with funds from other sources, will enable construction to proceed.

Booster Heart Systems Unveiled

Four different and completely implantable circulatory assist ("booster heart") systems, and calves in which 2 of the systems have been implanted, have been unveiled by the National Heart Institute's Artificial Heart Program (AHP). This is the first time that the various electronic, hydraulic, and thermal components of the systems have been brought together as complete functioning systems, although the subsystems had been tested individually in previously reported "bench" and animal trials.

The occasion of the unveiling was the presentation of the concurrent developmental efforts to an advisory group of 6 eminent physicians and

engineers at the Washingtonian Motel and the Gaithersburg facility of Melpar, Inc., Gaithersburg, Md. Members of the *ad hoc* advisory group are authorities in the particular areas of scientific and technological expertise required to develop the currently reported systems.

In welcoming the advisory committee, Dr. Theodore Cooper, director of the National Heart Institute, stated, "The successful combination of components and their implantation in animals provides not only a unique opportunity to assess where we should go from here in this (circulatory assistance) aspect of the AHP, but will also supply scientific keys of great value to our understanding of problems involved in developing systems for total heart replacement."

Dr. Frank Hastings, chief of the AHP, asked the advisors to submit their individual recommendations at a later date as to what foreseeable problems must be overcome to realize the full potential of circulatory assistance. Dr. Hastings also asked the advisory group to consider, in view of the usual progressive nature of heart failure, whether greater emphasis should be placed at this time on the development of systems to replace the heart totally rather than to permanently assist the living heart.

Dr. Hastings emphasized that the systems being presented are by no means ready for clinical trials in patients. He said that no special attempts were made to build long-term reliability into the components or in their miniaturization beyond that necessary for insertion into the 200-pound calves (which have approximately the same circulatory requirements and heart size as adult humans). Indeed, in an ensuing film depicting the systems and their implantation, some of the components appeared about the size and shape of bricks. Yet they were inserted easily by the surgeons into various recesses of the calf abdominal cavity. The total weight of each system is about 5½ pounds. Furthermore, the implanted systems have been functioning effectively for up to 6 weeks.

Dr. Hastings said the systems were designed only to identify problem areas pertaining to the compatibility of various components with each other and with the body. Nevertheless, he said, the attainment is a leap forward toward eventual clinical use. It is also a splendid example of coordination of the eight contracting firms that designed, tested, assembled, and implanted the 4 systems via the unique (for the biomedical sciences) systems-development approach employed by the AHP.

Dr. Egeberg Calls for Public, Private Aid

The responsibilities for the health care of the American people in the 1970s must be shared by the private and public sectors and neither sector can go it alone, according to the nation's senior medical officer.

"We must develop shared or cooperative arrangements that will best meet our national goal of high-quality health care for every American at reasonable cost," Dr. Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs, Department of Health, Education, and Welfare, said in an address at the annual luncheon of the Health Insurance Association of America (HIAA).

The aim of the national administration is to try to get a "fuller interaction" between private and public interests so as to solve problems affecting the population generally, the speaker emphasized.

"The dialog between the leaders of private and public health insurance has come a very long way in two decades," he continued.

"In many private sessions, at conferences like this one and at others sponsored by public agencies, I observed a growing desire to be mutually helpful. This is a good sign; anyone engaged in the health care business these days can use all the help he can get."

Dr. Egeberg listed a number of factors which he said have brought on and aggravated the nation's medical care crisis, including the lag in construction of out-of-hospital facilities, a chronic shortage of professional and allied health workers, the escalation in hospital costs, and a rise in doctors' fees. He also enumerated the demands on health services brought on by the Medicare and Medicaid programs; "inefficient management" of public programs, contributing to health cost increases; and private plans and public programs that take "expensive care" of advanced defects and diseases while neglecting preventive care.

He said that the HEW is asking Congress to provide more flexibility in health care facility legislation so as to shift the emphasis from hospital construction to "balanced community systems of interrelated health facilities. . . ."

Redirecting construction funds, Dr. Egeberg pointed out, reinforces a broader effort directed toward state and area-wide comprehensive health planning and health services development.

"The Health Insurance Association of America," he said, "is to be commended for vigorously supporting comprehensive health planning. The fact that over 200 insurance company representatives are involved in the planning process is good news back home."

The other major resource, besides facilities, that must be increased is health manpower, the HEW official continued. His department is not only emphasizing physician education and operational support to medical and dental schools but is aiming an increasing number of programs toward the education of subprofessionals, he said.

"It is too soon to predict whether we will lick the health manpower shortage during the 1970s, but we certainly mean to reverse the unfavorable trends of the 1960s," he said.

The Medicare program, according to Dr. Egeberg, "has no serious structural, administrative, or management problems, and it performs to the satisfaction of most beneficiaries and providers, but there is lots of room for improvement in the performance of the system."

There are, he said, defects in the conception and organization of the Medicaid program. He added that soon after his appointment at HEW he joined with Secretary Robert Finch in announcing a series of administrative actions to alleviate "some of the more obvious problems."

He then summed up what he termed the three main responsibilities for the health care of the American people in the 1970s. These, he said, are: Provision of the required quantity and variety of health care facilities and health manpower; improvement and expansion of the mechanisms of paying for health care; and the responsibility to make certain that the health money of the people is spent wisely.

Arteriosclerosis Studied at AHA Meeting

The results of a survey of research objectives in arteriosclerosis were reported by National Heart Institute scientists, Dr. Gardner C. McMillan and Mr. Alan Hough, at the American Heart Association annual meeting in Dallas.

Of a sample 1,930 grants geared to the study of arteriosclerosis (AS), the general breakdown is as follows: 90 per cent of the grants comprised basic and applied research while 10 per cent centered on development. Approximately 85 per cent of the grants were oriented to AS causation and prevention, 5 per cent to diagnosis, and 10 per cent to therapy.

The study revealed similar patterns of research among various agencies, both governmental and private, in the United States and Canada. One-third of the 1,930 grants pertained to lipid (fat) metabolism and one-sixth to studies on the clotting mechanisms of the blood and how they contribute to arteriosclerotic disease.

Approximately 20 per cent of the research efforts included such categories as multiple theories of causation, epidemiology, psychosocial studies, and genetics. Investigations into blood vessel metabolism accounted for 6 per cent while 5 per cent of the grants involved vascular injury and repair concepts. Only a fraction of 1 per cent were concerned with plaque hemorrhage or regression of arteriosclerosis.

The material for the study was drawn at random from AS investigations supported by governmental and private agencies in the United States and Canada during 1966 and 1967. Objectives of the sample were determined from full research proposals, abstracts, key words, or project title analysis.

Dr. McMillan commented, "It is clear that investigators interested in arteriosclerosis think as a group that it is most useful to study lipids and blood clotting mechanisms. Whether the relative inactivity of some of the other areas of study—for example, regression studies—represents an appropriate balance and correlation of research aims is an interesting matter for the scientific community to debate."

Arteriosclerosis is the general scientific name for a number of diseases of the arteries, including hardening of the arteries.

Atherosclerosis is the most common form of arteriosclerosis, and it affects primarily the larger arteries of the body. It is a condition in which the inner layer of the artery wall is thickened and irregular, and in which there are deposits of fatty substances on the interior of the artery.

The exact way an artery "hardens" is one of the major unsolved problems of medical science, and the subject of hundreds of research studies. For some reason still not clearly understood, fat-like substances build up on the inside walls of the arteries. Gradually they accumulate and form thick deposits called "plaques." These deposits both roughen the artery's normally smooth inner lining and narrow the channel for blood flow, making it more difficult for enough blood to get through. Making matters worse, the artery also loses elasticity with age and loses its flexibility.

Every artery throughout the body is subject to hardening, but the most often and most seriously affected vessels are the largest arteries, such as the aorta; the coronary arteries; and the arteries

that feed the brain and kidneys. Arteries may harden in one part of the body more rapidly than in other areas.

It is believed that some, but probably not all, of the fatty substances that build up on the artery wall come from the blood fats. People with high concentrations of fat in their blood develop hardening of the arteries earlier and are more likely to suffer serious consequences in later years.

Just what starts the process of hardening of the arteries is not known.

More than half of all deaths from the various kinds of heart disease are the consequence of hardening of the arteries. It is the culprit behind several of the most familiar afflictions of the cardiovascular system.

Insurance Executives Combat Rising Costs

A group of prominent insurance executives have called on health insurance companies to shift the emphasis of their policies and programs in an effort to help combat rising medical costs and to help make high-quality care available to all persons.

The executives made their remarks as part of a panel presentation to the Individual Insurance Forum conducted by the Health Insurance Association of America at the Sheraton Boston Hotel. Members of the panel were Daniel W. Pet-tengill, vice president, Aetna Life & Casualty; William C. White, Jr., vice president, Prudential; and Howard Ennes, second vice president, Equitable Life Assurance Society.

The health care system today is in a condition of crisis, the panel said, and one that is worsening. The panel members said the condition has been brought about by a conjunction of many forces, including shortages of manpower and facilities, rapidly rising costs, 21st century medical technology that is "shackled" to 19th century organizational patterns, and to the existence of a "two-class" system of health care which often results in inferior care, or no care, for the "poor and the near poor" in the inner cities and rural areas.

The system of the future, they said, must "shift the focus of concern from the extraordinary to the ordinary, emphasizing the prevention of disease, health maintenance and education, early diagnosis and treatment."

The panel urged insurers to play a more active role in health planning to improve the availability of health services and facilities.

Insurers can make a significant contribution, the executives said, by helping to put emphasis on the use of less costly forms of care.

"We have to reverse the order of priority from in-patient to out-patient care," the panel stated. "The future should see not only more emphasis on ambulatory care, but new methods of organizing this type of care."

The group noted that this approach would require the creation of community ambulatory care centers as part of systems to provide "outreach" services where people actually are as "points of entry" into the health care system.

"Perhaps a quarter of the surgery now performed in hospitals could be handled in these centers, as well as much diagnostic testing," the panel said.

A variety of other types of service facilities should be integrated with the ambulatory care centers, the group said, including such facilities as convalescent care and rehabilitative units, home care services and custodial facilities.

Insurers could help by expanding their coverages to meet the costs of such facilities, they said, adding:

"An immediate need is to make health insurance readily available to cover the cost of care in these alternative facilities and services. Preferably this should be on a basis which encourages their use in place of hospitals wherever appropriate.

"Our companies should review their current programs and make certain that benefits are adequate in relation to the need for protection, and comprehensive with regard to health care services."

The group also called on doctors and hospitals to adopt cost-saving techniques such as out-of-hospital diagnostic tests aimed at cutting down on the number of days a patient must spend in the hospital, full hospital operation on a seven-day-a-week basis, central purchasing of services and goods, such as laundry and food, and the acceptance by physicians of stepped-up development of paramedical personnel.

The latter development, the group noted, will not only help alleviate the shortages in the medical care field, but will also offer "hundreds of thousands of opportunities for people to find socially productive and individually satisfying job opportunities."

Bill Proposed to End Inheritance Tax

The Greeks did have a word for it—the word was Harpyiai, which translates to snatchers.

The Greek word, subsequently Anglicized to Harpies is apparently in the opinion of many Americans synonymous with the inheritance tax collector.

Congressman Robert Price of Texas, author of a bill to drive the Harpies away, is now seeking support of fellow Congressmen to end with what has been a major cause of mergers, as well as the liquidation of the family-held farm.

His bill is practically identical in context with one introduced by Senator Robert Dole of Kansas which was submitted to a nationwide vote by the National Federation of Independent Business with an 83 per cent majority supporting the bill.

Under present inheritance, or death tax laws, when the principal owner of a family, or closely-held, business approaches the end of his life span, a crisis results. Knowing on his death the business will be forced to pay an inheritance tax far in excess of any existing cash position, and often not even in line with its earning record, the usual procedure is to seek a merger to avoid liquidation.

The family head of a family-owned farming operation faces the same situation, inasmuch as today's inflated land and property values are not at all in line with the profitability of the enterprise, whether it be an independent business firm, or a farming operation.

The bills by Congressman Price and Senator Dole would permit the value of an estate for inheritance tax purposes to be set, at the option of the executor, either on the basis of the deceased's costs, or on the basis of the profit of the enterprise as revealed by income tax returns.

Congressman Price cites the hypothetical example of a family-owned cattle ranch that under the present system of appraising at today's inflated values would be assessed at \$300,000 leaving the inheriting son liable for \$110,500 in taxes, according to his computations.

Using this hypothetical example, to further illustrate, the Texas legislator says the actual profit being realized is only \$7,500. Thus, using a reasonable factor for determining value, the estate should only be valued at \$105,000 which would result in a death tax liability of \$22,500.

On top of the Federal death tax, most states also assess a similar tax, but usually the states will follow the Federal pattern.

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MISSISSIPPI MEDICAL
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Operation of the inheritance tax has and continues to create many problems which are probably more middle-class in nature than those of the very wealthy who have learned to use foundations and other loopholes to escape the full weight of the tax laws.

Many claim that because in many states appraisers are paid a percentage of the value of the estate, as well as probate fees being based on this formula, there is an effort to pad the value of the estate. A respondent to the Federation survey in California, a widow with a motel, recently charged that deliberate padding of her husband's estate not only stripped her of all cash, but necessitated borrowing money at high interest rates to keep the motel from being liquidated.

Probably because people only die once, legislators who have in the past sought to correct the death tax situation have experienced difficulty in obtaining mass support.

When he ran in the California primary for the United States Senate, Pierre Salinger, former White House press secretary attacked the California system of handing out appointments as inheritance tax appraisers branding it as a particularly vicious example of awarding profitable political patronage plums.

Under the Reagan administration an attempt was made to change the system, but failed to get legislative approval. This failure was registered after the present State Controller Hugh Flournoy requested all estate appraisers voluntarily take an examination to determine their fitness for the position. A substantial number refused to take the test, and of those who did, about half did poorly.

The present inheritance tax laws were enacted in the motion-laden depression years when men were selling apples in the streets at a time when a few heirs and heiresses came into their inheritances which they proceeded to flaunt with worldwide publicity. Thus, the legislation was to prevent this from happening in the future.

But the result has been that the extremely wealthy have developed means of escaping the full impact of the law while the closely-held business and the family farm, the backbone of the middle-class, bears the brunt.

Perhaps the comparison between this situation and Greek mythology is even more pertinent. In early ancient mythology Harpies were considered somewhat semi-beneficial but in the later era of the Argonautic sagas Harpies had degenerated into foul and loathsome creatures. The inheritance tax appears to have followed the same course.

Whether or not Congressman Price and Senator Dole will be able to emulate Calais and Zetes who drove off the Harpies, remains to be seen. Not only must they secure support from fellow legislators, say Federation researchers, but they must also educate the less knowledgeable that the inheritance taxes are no longer a "soak the rich" device, but a powerful destructive force of the middle-class backbone.

Artificial Placentation System Developed

New and clinically promising information about the profound circulatory changes that occur soon after birth—changes that enable the essentially aquatic fetus to adapt to a terrestrial, air-breathing mode of existence—was recently reported by scientists of the National Institutes of Health to the American Heart Association annual meeting in Dallas, Texas.

The studies were conducted by Drs. Warren M. Zapol, Theodor Kolobow, and Gerald G. Vurek, Ph.D., of the National Heart Institute's Laboratory of Technical Development, John L. Doppman, Clinical Center Diagnostic Radiology Department, and Joseph E. Pierce, D.V.M., NHI Laboratory of Kidney and Electrolyte Metabolism.

Their x-ray motion picture studies of blood flow patterns in isolated non-breathing fetal lambs supported by an "artificial placenta" show that the fetal circulatory pattern can be changed to the adult type of circulation in a matter of minutes—and reversed just as quickly even after several hours—by manipulating the levels of oxygen in the blood.

In these studies, premature and term fetal lambs were removed from ewes by caesarian section and maintained in a physiologically stable state for hours by the artificial placentation system developed by the NHI scientists. Several of the animals were delivered ("born") after prolonged periods on the artificial placenta with long term survival.

A key component of the artificial placentation system is an artificial lung, the spiral coil membrane blood oxygenator, that provided total respiratory support for the lambs via their blood. The unique design features of this lung permit gentle, efficient, and prolonged oxygenation of the blood with precise regulation of blood oxygen levels and blood flow.

The system also includes a temperature-controlled fluid bath ("artificial womb") in which

the fetus is submerged; specially designed canulas for joining umbilical vessels to the blood tubes of the system; and a modified roller pump to "milk" blood forward gently through the system and back to the lamb. (See attached background statement for more detailed descriptions of system components.)

With this system and the injection of radiopaque dye for the visualization of fetal circulation, the NIH scientists first confirmed a number of earlier studies that had been performed on exteriorized sheep fetuses (deteriorating for lack of a physiologically stable support system). These earlier studies had shown that very little blood flows through the lungs during fetal life, but that most of the blood traveling toward the lungs is instead diverted back into the general body circulation by a blood vessel—the *ductus arteriosus*—connecting the pulmonary artery to the aorta.

The previous studies had also indicated that constriction and closure of the ductus soon after birth was triggered by greatly elevated levels of blood oxygen, and that complete functional closure required about half an hour.

The currently reported studies provided the first "non-invasive" proof that higher physiologic levels of blood oxygen, at constant bloodflow, close the ductus arteriosus. Moreover, the NIH experiments revealed that this conversion of the fetal to an adult form of circulation allowing increased bloodflow through the lungs occurs within 5 minutes of the raising of blood oxygen content instead of the previously reported half hour. It is complete by 20 minutes. Furthermore, the process is reversible—the closed ductus can be dilated and then closed again by manipulating blood oxygen tension, even after being closed for 6 hours. Finally, the scientists observed that induced respiratory acidosis alone (an increase in blood acidity—carbonic acid—caused by insufficient exhalation of carbon dioxide) cannot dilate the ductus in the absence of a sufficiently high level of blood oxygen. Metabolic acidosis also does not delay, disturb or vary this constricting response.

These findings—heretofore unavailable x-ray documentation of circulatory phenomena in the as yet "unborn" fetal lamb—provide additional evidence for the use of the blood oxygenator to support newborn human infants during such crises as respiratory distress syndrome due to hyaline membrane disease. In such situations, the oxygenator would not only provide respiratory support until lung lesions cleared up spontaneously or in response to medication, but would also effect closure of the ductus and thus increase

bloodflow through the lungs to actively promote gas exchange in the lung. (Hyaline membrane disease kills approximately 25,000 newborn infants each year in the U. S.)

The blood oxygenator may also prove useful in the management of newborn infants afflicted with congenital (inborn) heart defects.

Heart Attack Will Be Studied at UAB

Heart attack kills 500,000-600,000 Americans per year. New and more sophisticated methods of treating this killer disease still have not significantly altered the appalling death toll from heart attack when it is accompanied by shock or congestive failure. In a major clinical research effort, a system of Myocardial Infarction Research Units has been set up in a small number of university medical centers by the National Heart Institute, National Institutes of Health. In these centers, scientists from many disciplines are focusing their skills on patients with "heart attacks" which are usually associated with myocardial infarction—the damaging or death of an area of the heart muscle resulting from a reduction in the blood supply reaching that area.

The largest and most extensively equipped of these Myocardial Infarction Research Units is located at the Medical Center of the University of Alabama in Birmingham. This new facility, as a part of University Hospital, will become operational next month. The impressive UAB unit, sponsored by the National Heart Institute and funded in part by the (Alabama) Vocational Rehabilitation Service, private philanthropy and the University of Alabama in Birmingham, is supported by a prestigious interdisciplinary team of physicians, surgeons, scientists, computer engineers and technicians. The unit houses a vast array of instruments and special equipment designed to help diagnose the extent of heart damage, to follow the development of complications and to improve treatment in ways "hitherto not possible."

According to Dr. T. Joseph Reeves, MIRU Director, the unit is divided into four sections. The Clinical Section deals directly with patient care; the Computer Section, staffed by biomathematicians and computer specialists, is concerned with new applications of computer sciences to intensive patient monitoring, information retrieval and, eventually, direct patient care; the Pa-

ORGANIZATION / Continued

thology Section is responsible for study of the anatomy of blood vessel and heart muscle diseases; and the Bioengineering Section will work toward the development of different and improved methods of instrumentation to assist the heart through the critical period when life and death hang in the balance.

Dr. Reeves explained that physicians in the unit are interested in identifying heart abnormalities more quickly than has been possible in the past. Many deaths, he pointed out, occur before the victim ever reaches the hospital; a great many more occur suddenly, even after admission. If symptoms and complications are readily identified, proper treatment can be started immediately.

Members of the MIRU staff also are particularly concerned with the problem of the complicated myocardial infarction. Recent advances in electrocardiographic monitoring have greatly reduced the hazard of death from electrical instability of the heart which, if not promptly treated, may lead to total disorganization of the heart beat. However, relatively little progress has been achieved in the treatment of those patients in whom a major injury to the heart muscle prevents the heart from functioning adequately as a pump. When this occurs, "congestive heart failure" or cardiogenic shock develops. Under these circumstances, even in the most modern clinical coronary care units, the mortality rate remains extremely high. One of the major objectives of the new unit is to materially reduce death from this cause.

One of the major facets of the MIRU program at the UAB is the use of circulatory assist devices. Ready for application to patients is the Bramson Membrane Lung (artificial heart-lung machine). The physician-scientists in the new unit believe that if the severely damaged heart can "rest" for a number of hours it will have a better chance of recovering its strength. During this time, the membrane oxygenator will supply the vital organs of the body with the required blood. A special room of the unit is designed for this circulatory assist program.

In dealing with heart attack victims, physicians have been meeting crises as they occur and, as a result, data accumulation has suffered. An important aspect of the program will be data accumulation through use of a uniquely programmed IBM 1800 computer which simultaneously mon-

itors and records all important bodily functions of patients in the four MIRU beds. The company-programmed system has been altered by a support group of highly skilled specialists so that it will perform numerous functions never before programmed for conventional computer operations. The MIRU computer team edited and expanded the master programming system to "custom-fit" the job. One improvement is the retention of certain basic program modules needed for a number of "tasks." This retention capability eliminates the need for external information storage and time consuming re-entry of instructions which are needed on a continuing basis.

The University's computer authority, Dr. Josiah Macy, Jr., said that this system gives researchers the computer flexibility they need without sacrificing high performance in simultaneous data-collection and monitoring of patients.

"In addition to standard monitoring procedures, information retention and staff-alerting functions, we hope to use the computer for patient care procedures as soon as feasible," Dr. Macy said. Some similar patient care functions are already in everyday use at the UAB University Hospital for postoperative open heart surgery patients.

Other equipment will permit x-ray and fluoroscopic examination of the heart without moving the patient. Specially built beds swing smoothly into the required position, leaving behind the image-distorting portion of the bed frame.

The program also will include new instrumentation for cardiovascular diagnosis of critically ill patients. Included are such devices as radar and sonar probes, which are used to measure heart size and cardiac chamber motion, as well as the conventional electrocardiogram, phonocardiogram and other more routine procedures.

Central Medical Elects New Officers

Central Medical Society's new slate of officers recently took office. President for 1970 is Dr. William O. Barnett of Jackson. Dr. T. E. Wilson III is the new vice president and Dr. William Pontius is president elect.

Dr. Robert P. Henderson was elected secretary of the society. Outgoing president is Dr. Frank Bower.

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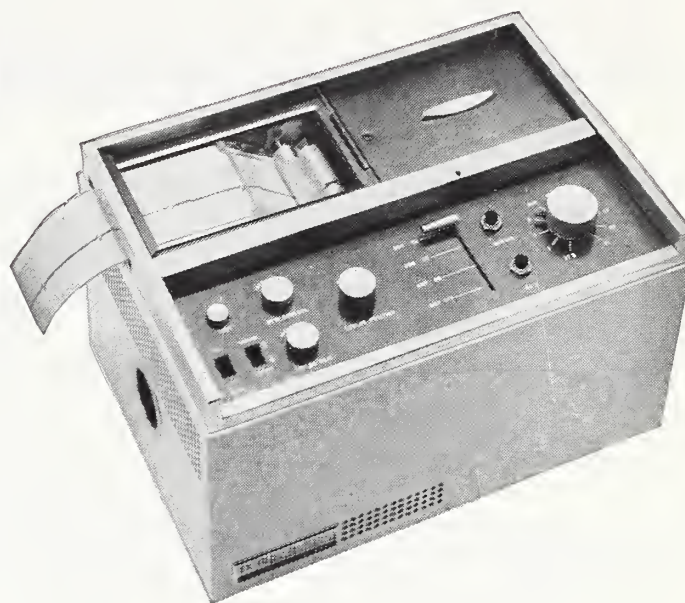
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Index to Advertisers

AMPAC, MPAC	95	Lakeland Nursing Center	7
Arch Laboratories	99	Lederle Laboratories	4, 12, 14, 87
		Eli Lilly and Company	front cover, 18
Breon Laboratories	14A, 14B, 14C, 14D		
Burroughs-Wellcome	80A	National Drug Company	second cover, 84A, 84B
Campbell Soup Company	68A	Parke Davis and Company	92C, 92D
		Pharmaceutical Manufacturers Association	16
		Wm. P. Poythress	92A
Geigy	80B, 80C		
		A. H. Robins Company ..	10A, 10B, 11, 68D, 83, 92B
Highland Hospital	15	Roche Laboratories	6, 89, fourth cover
Hillcrest Hospital	10		
Hoechst Pharmaceuticals	17	Sandoz	80D
Hynson, Westcott and Dunning	3	G. D. Searle	68B, 68C
		Smith, Kline and French	8
Kay Surgical	99	Thomas Yates and Company	third cover

IN CONCLUSION

Department of Health, Education, and Welfare, a bureaucrat's bureaucracy, may be broken up by Nixon administration. Word is that Secretary Finch is finding it impossible to manage sprawling agency with 107,000 employees, 255 separate programs, and an annual budget of \$60 billion. AMA has long advocated a separate cabinet level Department of Health and may get it yet.

American Hospital Association forecasts a stronger and bigger role for hospitals in delivery of medical care in the 1970's. AHA says that the "hospital administrator must increasingly assume the role of chief executive officer," recognizing that he has a community responsibility. Prediction also says that physicians will be "assaulted with greater demands to pay attention to the social and economic problems of medical care."

Los Angeles veterinarians have organized a program of small animal care for pets of welfare recipients, calling it Vet-aid. Idea is that 610,000 Angelinos on welfare can't afford vet fees and pets suffer as a result. Animal Health Foundation of California will administer program which is starting up with \$200,000 obtained from public contributions.

Brandeis University reports in a nationwide study of child abuse that 90 per cent of incidents occur in the child's home. Mothers abuse children more frequently than fathers, and most incidents involved beatings. Half the children and two-thirds of the abusive parents showed deviation in behavioral characteristics. Only 17 per cent of child abusers were convicted by courts.

Louisiana State University will construct a \$10.6 million school of veterinary medicine on the Baton Rouge campus on a 44 acre site in the shadow of Tiger Stadium. Federal funds will be provided by HEW grant under Health Manpower Act. Construction is scheduled to begin next June and school is to be opened in 1973. At present, only school of veterinary medicine in Alabama-Louisiana-Mississippi area is at Auburn University.

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CONTENTS

ORIGINAL PAPERS

Emergency Surgery for
Acute Myocardial
Infarction 101 HILARY H. TIMMIS, M.D.;
DAVID DAVIS, M.D.;
PATRICK H. LEHAN, M.D.;
and JAMES D. HARDY, M.D.

Idiopathic Hypertrophic
Subaortic Stenosis 106 KARL W. HATTEN, M.D.

SPECIAL ARTICLES

Changing Methods and
Changeless Principles 110 WILLIAM K. KELLER, M.D.

Radiologic Seminar
XCIII: Inferior
Vena Cavography 114 OTTIS G. BALL, M.D.

EDITORIALS

Invasion of Privacy:
New Angle on Smoking 117 ASH and CRASH

A Punitive Bill Aimed
at Physicians 118 Malpractice Threat

Restraining Devices Help
Mother Make Sure 119 Keep the Tykes Alive

The Inside Story on
AMA Membership 119 Facts Explain Figures

The Old Admonition:
Watch Those Narcotics 120 Do's and Don'ts

THIS MONTH

The President Speaking 116 'Or Lose by Default'
Medical Organization 129 102nd Annual Session

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D. C. Medical Society Discourages Smoking

The Medical Society of the District of Columbia, in mid-January, launched a new offensive against smoking. It called for a ban on smoking in public schools, an end to cigarette sales in hospitals, and for separate hospital facilities for patients sensitive to cigarette smoke.

The Society also asked that physicians place "No Smoking" signs in their offices, that the government stop using tax dollars to promote the U. S. tobacco industry, and that the Federal Aviation Administration and Congress approve petitions and bills for either separate smoking compartments or smoking bans aboard commercial airliners.

Joining the Society were 60 public and private organizations comprising the D. C. Interagency Council on Smoking. In addition to all-out educational promotions, physicians and ministers staffed four five-day withdrawal clinics, sponsored by the Seventh-Day Adventist Church.

Voluntary Health Conference Slated

The third national voluntary Health Conference will be held at the Statler-Hilton Hotel in Washington, D. C., May 7-8, 1970. Sponsored by the AMA's Board of Trustees and Council on Voluntary Health Agencies, the meeting will emphasize "Health Team Relationships: Professional Associations, Governmental Agencies, Voluntary Organizations."

National leaders will explore the roles, responsibilities and relationships among professional associations, governmental agencies and voluntary organizations in the provision of health care, broadly interpreted to include research, health education and health services.

Information on registration and reservations may be obtained from Dr. D. A. Dukelow, Conference Coordinator, Department of Health Education, AMA, 535 North Dearborn Street, Chicago, Ill. 60610.

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NEWSLETTER

March 1970

Dear Doctor:

With an estimated six weeks to go, the Regular Session of the Legislature is considering antimedicine and anti-M.D. bills. Biggest danger to public health is Senate Bill 1905, proposal to license chiropractors and to put badge of legality and respectability on it. Bill is sponsored by Sens. Robertson, Yancy, Perdue, and Watson and has been referred to Senate Public Health Committee.

In the House, HB 407 would make a shambles of judicial safeguards in medical malpractice cases. Bill would permit jury awards without corroborative medical testimony, sending premiums for professional liability insurance sky high or drive it from state market.

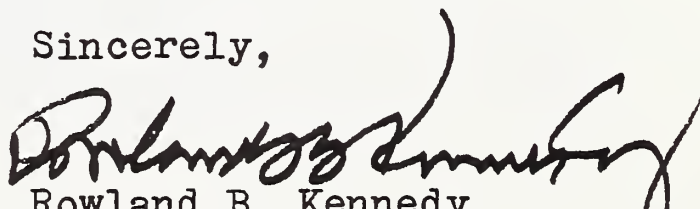
Infant mortality showed a decrease in Mississippi during third quarter of 1969 over same three months a year previously. State Board of Health reports infant deaths down to 337 from 392, a decrease of 13 per cent. In the same period, live birth rate went up 5.4 per cent, up 6.8 per cent for whites and 4 per cent for nonwhites.

Many news media sources are saying that it's no longer a question of "if," only "when and what," on national compulsory health insurance. Plans are in offing from Reuther, Javitts, Rockefeller, and Kennedy. A's Mediredit is voluntary, however. But Nixon administration appears to oppose all, saying that nation does not have health manpower to staff program and that "we can't even handle Medicaid."

American College of Surgeons has outlined policy for procedures involving human experimentation. Physicians and institutions must be qualified, procedures explained, potential benefits must outweigh risks, and surveillance guaranteed. College Regents also prescribed carefully controlled public release of clinical results with appropriate restraints.

Seven of nine multi-county regions in Mississippi now have mental health centers or are preparing to go operational soon. Centers already open include Tupelo, first in state, and Oxford. Units for Jackson and Greenville are under construction, and plans are advanced in Meridian, Clarksdale, and Gulfport. Program is largely federally funded with grants totaling \$3.7 million.

Sincerely,


Rowland B. Kennedy
Executive Secretary

IRS Requires Identification Number

The Internal Revenue Service has ruled that Section 604 (a) of the Internal Revenue Code requires all insurance carriers to file form 1099 with respect to medical expense benefit payment in excess of \$600 in any year made under Group Health Insurance policies directly (that is assigned to the physician).

The information necessary for the various carriers of group health insurance to make their report to IRS requires that they know the Taxpayer Identification Number of the physician (Social Security Number of the individual physician or Employer Identification Number as appropriate).

Beginning January 1, 1970, the carriers cannot issue a draft directly to a physician unless it has the appropriate Taxpayer Identification Number. All physicians should inform their billing clerks to include the appropriate information on any claim forms where an assignment is involved to prevent delay in processing the claim.

AMA Hosts Meet of Medical Executives

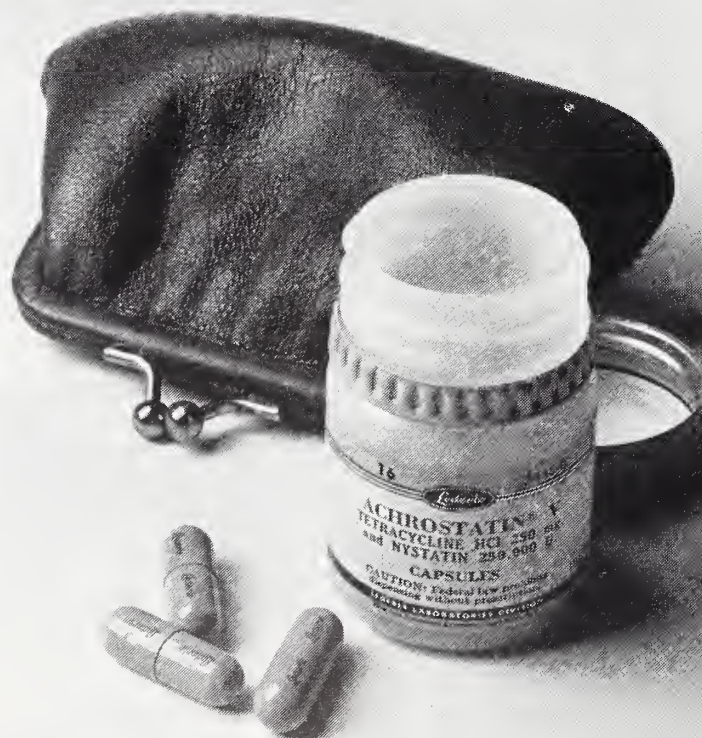
The AMA hosted a unique meeting in Chicago Jan. 28-29 to strengthen communications and liaison between its components and related professional organizations. Invited to the Conference for Senior Medical Executives were 249 executives of state and county medical associations and of 32 medical specialty societies.

The two-day session was designed to encourage the free exchange of information between the AMA administrative staff and the registrants on medical programs and problems, and to promote a greater utilization of AMA services.

Each of the AMA division directors presented a summary of activities performed by his staff, and additional reports were made by members of the Office of the Executive Vice President.

Dr. Ernest B. Howard, AMA executive vice president, opened the Conference. After the individual presentations, the registrants participated in eight different discussion groups which focused on specific programs, services, and needs in which both the AMA and the invited organizations can participate to their mutual benefit.

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WIRELINE

Contract Surgeon Coming Back Washington - Taking a cue from the way things were done a century ago, the Gates Commission, studying health needs of the military and their dependents, has recommended that civilian physicians be employed to serve domestic military installations, thereby easing off Doctor draft. Commission also recommends expanding CHAMPUS to cover all health services for active duty dependents and retirees.

Health Insurance, Premiums Grow in '69 New York - Private health insurance and prepayment plans grew to record highs in 1969, according to the Health Insurance Institute. More than 1 out of 204 million Americans own some form of health care coverage. Companies and plans paid out \$13.5 billion last year with \$8 billion going to hospitals, \$4 billion to physicians and other practitioners, and remainder for miscellaneous benefits.

Liability Hike in Alabama Montgomery - The Medical Society of the State of Alabama says that their members will pay up to \$1,000 each for professional liability insurance coverage in 1970. State has 37 suits now pending totaling \$7.9 million in plaintiffs' claims. Rate increase amounts to 25 per cent for general practitioners up to 75 per cent for anesthesiologists, surgeons, and those in ob-gyn. Upward trend is national in scope.

May Warn Pill Patients Directly Washington - In an unprecedented move, FDA may send warnings on oral contraceptives directly to women rather than through usual channel of M.D.'s. Idea is that message would be simple, direct, and nontechnical. But controversy is likely to break out if a federal agency invades time honored physician-patient relationship. Some see move as undermining patient confidence in physicians. Before such action could be taken putting messages in packages, FDA must publish intentions.

Seeks Bigger Health Care Plans Chicago - American Medical Association says that OEO will try to expand poverty health care programs by direct aid to hospital outpatient departments. Idea is to intensify care in ghetto. Pattern under Republicans is same as when LBJ was in: Although the Congress has cut general budget for three successive years, agency's health care program has always been expanded.

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ORIGINAL PAPERS

Emergency Surgery For Acute Myocardial Infarction

HILARY H. TIMMIS, M.D.; DAVID DAVIS, M.D.;
PATRICK H. LEHAN, M.D.; and JAMES D. HARDY, M.D.
Jackson, Mississippi

THE ROLE OF SURGERY in the palliation of coronary atherosclerosis is an accepted clinical modality, and the recent literature documents the usefulness of many operative procedures.^{1, 2, 3, 4} Initially, the challenge of atherosclerotic myocardial pathology was met by surgical techniques not requiring cardiopulmonary bypass to repair lesions such as ventricular aneurysm. Open heart surgery is now commonly used for the correction of this and other sequelae of myocardial infarction. Furthermore, operative procedures aimed at preventing myocardial infarction and relieving symptomatic myocardial ischemia are also performed in many centers. These operations consist of indirect methods to increase myocardial blood flow, mainly by internal mammary artery implantation and, less frequently, direct repair of locally occluded coronary vessels by endarterectomy and grafting techniques. Generalized coronary atherosclerosis resulting in progressive cardiac dysfunction and imminent death, has been managed successfully by cardiac replacement and is the most common indication for heart transplantation.

From the Departments of Surgery and Medicine, University of Mississippi Medical Center.

Until recently, the surgical armamentarium had nothing to offer the patient in cardiogenic shock due to myocardial infarction and the failure of medical measures invariably resulted in

Until recently, the surgical armamentarium had nothing to offer the patient in cardiogenic shock due to myocardial infarction, and the failure of medical measures invariably resulted in death. Two years ago Mobin-Uddin and Heimbecker independently reported results of a radical surgical concept used in these cases. In this paper the authors report the case of a middle-aged male who underwent surgery following peripheral vascular collapse from acute rupture of the ventricular septum after myocardial infarction.

death. However, in 1947, Murray reported a significant improvement of survival rate in dogs after acute occlusion of the anterior descending coronary artery when the infarcted muscle was

immediately excised.⁵ Twenty years later, this radical surgical concept was corroborated independently by Mobin-Uddin and Heimbecker, and the latter further described the successful clinical application of the procedure.^{6, 7}

The following report details our experience with a middle-aged male who appeared to be a candidate for this unusual procedure.

CASE REPORT

J.W., a 48-year-old veteran, was transferred to the University Medical Center for emergency evaluation and treatment following the sudden onset of a harsh precordial murmur and peripheral vascular collapse while convalescing from a recent acute coronary occlusion. During cardiac catheterization, the intravenous administration of a vasopressor was necessary to maintain an arterial pressure above 90 mm. Hg. His heart was extremely irritable at this time, and recurrent episodes of ventricular tachycardia and one of fibrillation were reversed by direct current shocks. A left ventricular angiogram revealed a large left to right shunt at the ventricular level, and there was very slow clearing of contrast material from the left ventricle. It was evident that cardiac function was critically reduced by the development of an intracardiac shunt in addition to the obvious muscle dysfunction manifested by a hypokinetic left ventricular muscle. With these findings, repair of at least the interventricular septal defect was recognized as the only possible recourse to survival.

	(a)	(b)
	Before	After
	mm.Hg	mm.Hg
Right atrium	30	10
Pulmonary artery	60/40	25/10
Aorta	50/30	130/80

Figure 1. Intraoperative pressure measurements.

Type specific blood in adequate quantity was rapidly prepared, and with all in readiness, the operation was begun. Initially, the right external iliac artery was exposed under local anesthesia for arterial input from the heart-lung machine, in the event of cardiac arrest during anesthetic induction. General anesthesia was then carefully induced with no untoward change of his vital signs. The chest was entered through a median incision and the sternum split in the midline to

expose the entire anterior surface of the heart. On inspection, the heart appeared grossly enlarged and both atrial walls were markedly tense due to biventricular failure. Preparations were rapidly made to begin cardiopulmonary bypass, particularly since he was requiring increasing levels of norepinephrine to maintain a pressure above 70 mm. Hg.

When his circulatory load was taken over in part by the action of the heart-lung machine, the chamber pressures which were markedly altered (Figure 1) rapidly returned to normal levels. After complete cardiopulmonary bypass was instituted, the heart was examined more carefully. Fine adhesions were noted between the anterolateral surface of the left ventricle and the parietal pericardium. These were easily lysed, exposing a discolored, inflamed segment of myocardium which moved paradoxically. The right ventricle was then entered through a 5 cm. incision which avoided major coronary branches. A 2 cm. ventricular septal defect was noted almost adjacent to the apex, behind some heavy trabeculations which were divided. The edges of the defect were yellow in color, irregular and very thin for a distance of about 1 cm. The decision was made at this point to repair both the damaged left ventricle as well as the ventricular septum, to give him the best possible chance for survival. The non-contractile segment of the left ventricle was excised, leaving a circular defect about 5 cm. in diameter, the cut edges of which were mottled and ecchymotic (Figure 2).

REPAIR COMPLETION

Repair was accomplished with deep, interrupted mattress sutures of Dacron backed with Teflon felt to prevent their tearing through the soft myocardium (Figure 3). The septal defect was closed, in turn, with a large Teflon felt patch which was anchored with mattress sutures of Dacron backed on both sides of the septum with Teflon pledgets (Figure 4). At the completion of the repair, no arterial blood was noted in the right ventricle. The right ventriculotomy was then closed and air evacuated from the heart after which cardiopulmonary bypass was gradually discontinued. The heart accepted the circulatory load remarkably well and continued to contract vigorously when all support was discontinued. Chamber pressures were measured again and are shown in Figure 1. Pulmonary artery and right atrial samples were collected for oxygen analysis and were found to be equal, indicating complete repair of the intracardiac shunt.

Reaction from anesthesia was uneventful and

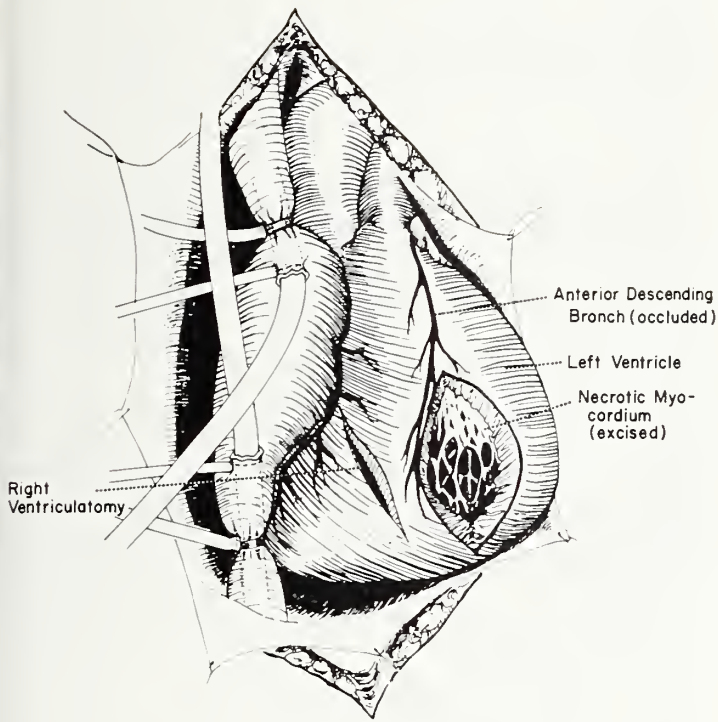


Figure 2. Following exploration of the ventricular septum through a right ventriculotomy, a 5 cm. segment of akinetic, discolored left ventricular myocardium was excised from the apex.

during the first 24 hours, assisted ventilation was used to give maximal oxygenation. He initially exhibited a low cardiac output picture characterized by peripheral vasoconstriction and oliguria, although his arterial pressure remained at a satisfactory level. However, he responded well to the temporary additional support supplied by an infusion of isoproterenol and throughout the remainder of his initial hospitalization, exhibited no further evidence of reduced cardiac function. On the second postoperative day, ventricular irritability became evident by the appearance of frequent premature ventricular contractions and episodes of ventricular tachycardia. Isoproterenol was discontinued, digitalis was withheld and a continuous infusion of xylocaine hydrochloride was begun.

Potassium supplements were also given to keep the serum potassium above 5.0 mEq/l. Despite a progressive increase of xylocaine administration to a maximum level of 4 mg/min, intermittent ventricular arrhythmias persisted. For the most part, satisfactory cardiac output was maintained during these periods; however, on occasion, direct current shock was necessary to obtain a more suitable rate and arterial pressure. Increments of procaine amide, 250 mg., were added to his program along with Dilantin, which

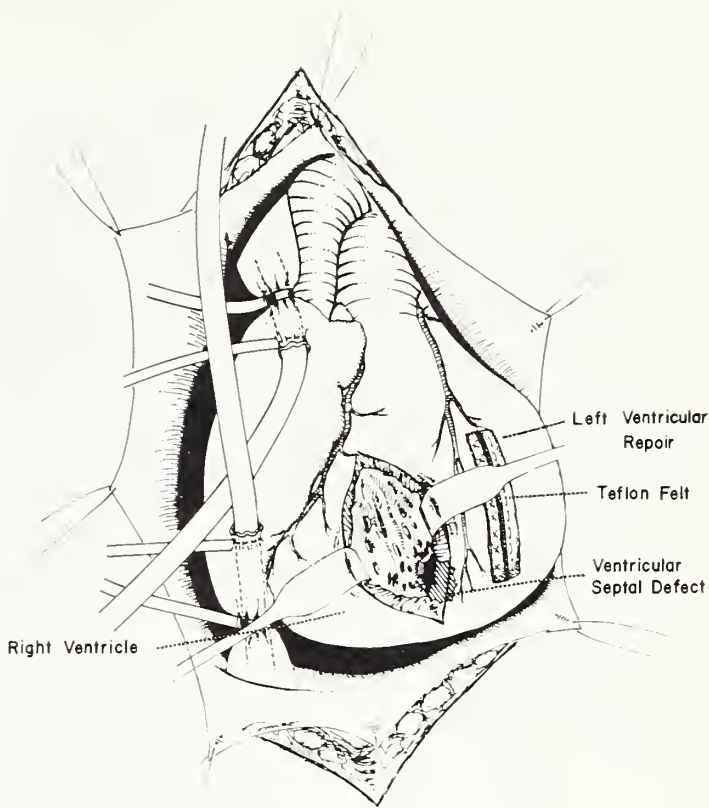


Figure 3. The left ventricular defect was closed with Dacron mattress sutures backed with Teflon felt strips.

was used primarily for mild convulsive activity. On the eighth postoperative day, evidence of ventricular irritability began to recede and his myocardial depressants were gradually reduced and finally stopped.

VASCULAR CATASTROPHE

By the 15th postoperative day, he was ambulatory and his wounds were healing in an uncomplicated manner. At this time, he was transferred to his referring hospital for continued convalescence and care. Two days later, following the onset of severe chest pain and diaphoresis, arterial pressure fell from 160 to 80 mm. Hg. and he became severely oliguric. A vascular catastrophe was suspected, particularly pulmonary embolization or recurrent myocardial infarction, and most of the evidence pointed to the latter. He was moved immediately to the intensive care area of the University Medical Center where ventilatory and circulatory support were continued.

Since cardiac output was inadequate for satisfactory cerebral and renal perfusion, he became severely obtunded and his blood urea nitrogen began to rise rapidly. Cardiac action was improved somewhat by isoproterenol infusion and further augmented with intravenous Glucagon. Peritoneal dialysis was instituted to remove ex-

cess body water and to improve the ionic environment of his heart. He began to improve steadily with these adjuncts which were then gradually withdrawn and finally discontinued on the ninth hospital day. The remainder of his convalescence was uneventful and he gained strength steadily. Long-term anticoagulation was instituted because of his history of recurrent myocardial infarction as well as for the treatment of lower extremity thrombophlebitis. At the time of his hospital discharge, he was taking Coumadin, digitalis, and a low cholesterol diet.

Prosthetic valve replacement for mitral regurgitation following papillary muscle infarction, ventricular aneurysmectomy, and cardiac replacement have all been performed at the University Medical Center for acute and chronic sequelae of coronary atherosclerosis. In most in-

stances, a methodical evaluation by cardiac catheterization and angiocardiology is absolutely essential to define the specific mechanical abnormality, the magnitude of residual myocardial reserve and the status of the coronary arterial tree.

DISCUSSION

When peripheral vascular collapse intervenes, as in this patient, the primary aim of study is to pinpoint the intracardiac abnormality so that the feasibility of effective emergency surgery can be determined. A large left to right shunt was demonstrated here, which could be repaired in a relatively straight forward manner. However, in retrospect, we believe that survival depended to a greater extent on excision of necrotic myocardium, which not only failed to contribute to overall left ventricular function, but actually critically reduced it. This information was provided by an angiocardigram, which demonstrated the

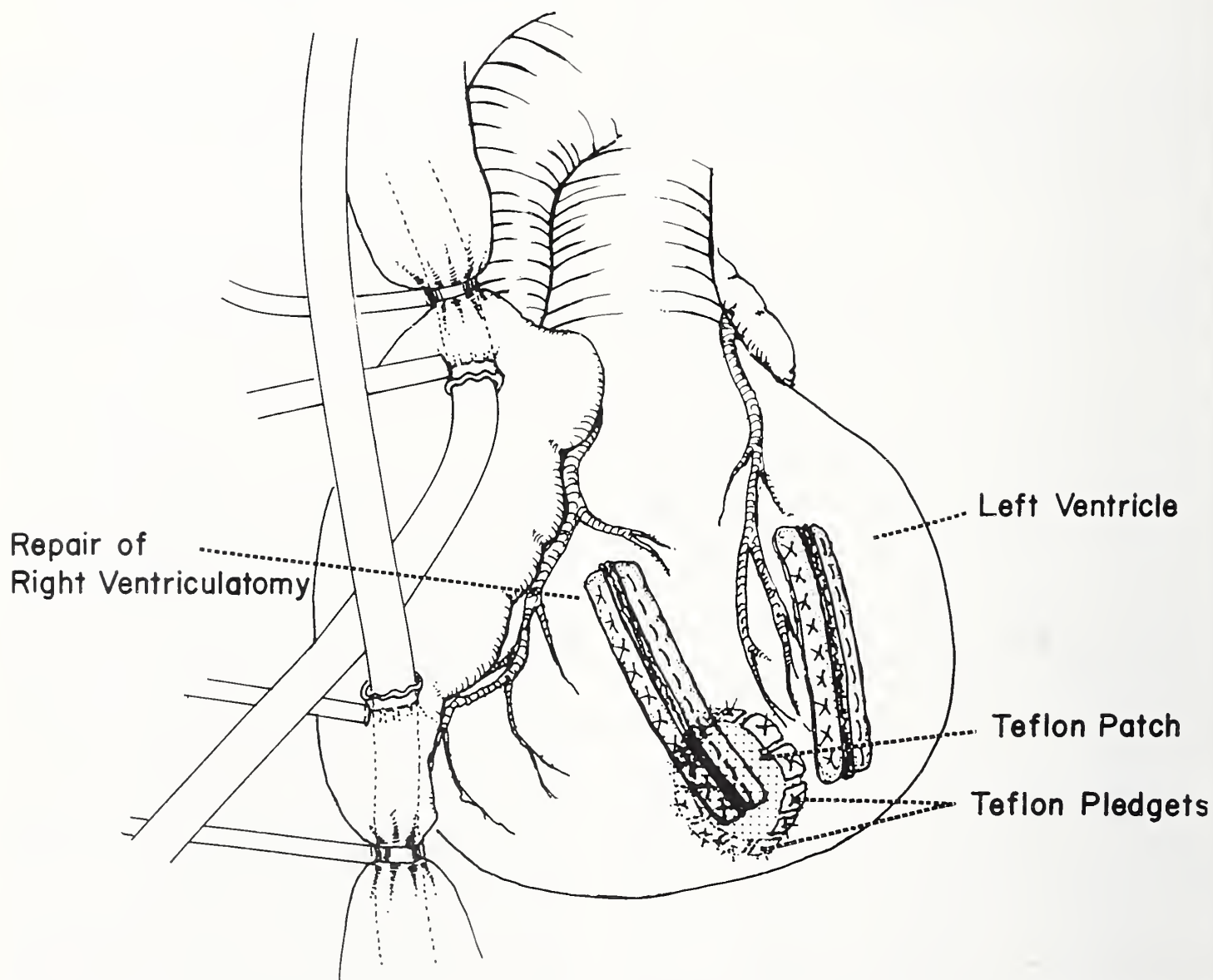


Figure 4. The ventricular septal defect was repaired with an over-size patch anchored with mattress sutures of Dacron backed on both sides of the septum with Teflon pledgets. Since there was no anterior

rim, the sutures in this area were passed through the anterior wall of the right ventricular apex and tied down over Teflon felt. The right ventriculotomy was then closed.

akinetic left ventricular segment as well as very delayed emptying of this chamber.

Preliminary exposure of the iliac artery for arterial input from the pump is used in instances where limited cardiac reserve or cardiac irritability are a major impediment to safe anesthetic induction. Since arterial pressure began to decline further from the moment the chest was opened until partial support was given by the heart-lung machine, it was distinctly advantageous to have this period as short as possible.

Identification of the extent of myocardial infarction was based mainly on an evaluation of myocardial contractility rather than on the appearance of the epicardial surface. In order to resect the damaged muscle, it was necessary to transect some major diagonal tributaries. However, the coronary arterial branches did not bleed and all aspects of the cut edge of the left ventricular opening exhibited ecchymoses.

Repair of both the left and right ventriculotomies was greatly facilitated by the use of mattress sutures backed with cloth (Teflon felt). This maneuver is helpful for reliable approximation of all friable tissues with or without inflammatory edema. Repair of the septal defect posed a special problem in that the edges were necrotic, and no tissue was present where the septum normally is continuous with the apical myocardium. Consequently, about half of the mattress sutures anchoring the septal patch were passed through the apex and tied over Teflon pledgets.

Following cessation of cardiopulmonary bypass for the repair of any cardiac abnormality, the manner in which the heart resumes the circulatory load is usually a reliable yardstick of both early and long-term cardiac function. In this instance, restoration of cardiac function was remarkably good immediately and proved to be sufficient to carry the patient through innumerable episodes of tachyarrhythmias as well as another bout of peripheral vascular collapse, probably due to recurrent myocardial infarction.

Intravenous isoproterenol was administered at two points in his hospital course to provide the improvement of cardiac contractility and output which were essential for ultimate recovery. In most areas, this drug has replaced the routine infusion of norepinephrine to produce a strong inotropic effect without undesirable stimulation of alpha receptors, notably extensive vasoconstriction. Tachycardia is seldom severe and the reduction of peripheral vascular resistance enhances cardiac output further. Another extraordinary feature of this case consisted of the degree of pharmacologic depression which was necessary to suppress irritable ventricular foci.

Xylocaine was chosen because of its titratability and relative lack of toxicity. In our experience it is seldom necessary to use more than 2 mg/min for postoperative ventricular arrhythmias and usually half this dose suffices. This patient continued to exhibit signs of irritability with 4 mg/min at which level mild convulsive activity due to xylocaine appeared. Here the myocardial depressant effect of Dilantin may have supplied the additional suppression which was necessary for a safe recovery.

Needless to say, persistent first hand observation and care by a trained and devoted resident and nursing staff was essential to initiate and monitor the various therapeutic measures which underwrote his survival.

SUMMARY

A middle-aged male in peripheral vascular collapse from acute rupture of the ventricular septum following myocardial infarction underwent emergency cardiac catheterization and open heart surgery. In addition to correction of a ventricular septal defect, infarcted left ventricular myocardium was excised and the ventricle repaired. Restoration of left ventricular function was gratifying, although his postoperative course was complicated by ventricular irritability and recurrent infarction. He subsequently recovered and was discharged. Some aspects of the operative procedure and postoperative management are reviewed. ★★★

2500 North State St. (39216)

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Idiopathic Hypertrophic Subaortic Stenosis

KARL W. HATTEN, M.D.
Vicksburg, Mississippi

THE CONCEPT OF OBSTRUCTION of the aortic out-flow tract has developed rapidly since the definitive report by Brock¹ in 1957. Other cases had been reported prior to 1957; however, Brock initiated the concept of dynamic obstruction. Previously, patients with idiopathic hypertrophic subaortic stenosis were diagnosed as having either valvular heart disease or coronary atherosclerosis depending on which symptoms and physical findings were most prominent. The delay in describing IHSS was in part due to the paucity of anatomical findings at surgery or at postmortem. The present case concerns a patient whose initial diagnosis was valvular heart disease and who later developed symptoms of arteriosclerotic heart disease.

This 40-year-old white man was first noted to have a heart murmur at the Naval Academy in 1950. He was not allowed to finish his training there but was given a commission in the Construction Battalion and finished his service time without difficulty. At the time of discharge he was told the murmur was still present. In 1965 because of the increase in intensity of the murmur, the patient underwent cardiac catheterization at the University Hospital in Jackson. At this time a cineangiogram of the left ventricle was done and did not show mitral regurgitation. On measuring the pressures no gradient was noted between the left ventricle and the subaortic area. However, it is noted that the pressures were somewhat erratic and could not be explained at that time. There was no evidence of septal defects.

Following this the patient had a rather insidious onset of shortness of breath on exertion and then began to develop chest pain. These pains were over the precordial area and usually came

Prior to 1957, patients with idiopathic hypertrophic subaortic stenosis were diagnosed as having either valvular heart disease or coronary atherosclerosis. A case is presented of a patient with IHSS whose initial diagnosis was valvular heart disease and who later developed symptoms of arteriosclerotic heart disease. The author discusses diagnosis and treatment of the syndrome.

on after exertion, especially if he had just eaten. The pains would last some two to three minutes, would be dull, aching in nature, but would not radiate into his arm or neck. They also seemed to occur more frequently in the afternoon or when he was fatigued.

Blood pressure in the left arm was 110/75. The pulse was brisk and full. The neck veins were flat. Examination of the heart revealed that the PMI was 1 cm. lateral to the mid-clavicular line in the 5th intercostal space. A thrill was not present. There was no evidence of a double apical impulse. Auscultation revealed a grade four over six, harsh, diamond-shaped, systolic murmur. It was heard best along the left sternal border but did radiate into the aortic and pulmonary areas. It did not radiate into the axilla, neck, or into the subscapular areas.

Read before the General Session on Medicine, 101st Annual Session, Mississippi State Medical Association, Biloxi, May 14, 1969.

In May 1967, because of the chest pain, the patient had an electrocardiogram and double Master's two-step test performed, and the double Master's two-step test was interpreted as being positive. He was begun on isosorbide dinitrate (Isordil) and nitroglycerin. On these medications the patient noticed no improvement in the symptoms. In October 1968, the patient was seen at the Veterans Administration Hospital. It was recommended that he have a repeat of the cardiac catheterization. This was performed at the University Medical Center. At that time the cardiac catheterization revealed that there was a 60 mm. mercury gradient between the left ventricle and its outflow tract. The cineangiographic studies showed mitral regurgitation and an area of narrowing in the left ventricular outflow tract. With these findings it was the impression that the patient had idiopathic hypertrophic muscular subaortic stenosis.

He was treated with propranolol in increasing dosages. His exercise tolerance improved, and there was a decrease in the number of episodes of chest pain. The propranolol dosage was increased to 30 mg. four times a day. However, on this dosage his heart rate slowed to 45 at rest. He felt somewhat uncomfortable and had a vague feeling of shortness of breath. The dosage was reduced and his heart rate increased to 60 to 65 per minute and the symptoms disappeared.

IHSS STATISTICS

Idiopathic hypertrophic subaortic stenosis has been reported in the newborn and the elderly. The murmur is discovered in the asymptomatic patient at the average age of 15 years. The average age of onset of symptoms, using the New York Heart Association Classification, is 27 years for functional class II and 35 years for combined classes III-IV. In nearly all studies there is a predominance of males.²

The most common presenting symptoms are dyspnea, angina pectoris, lightheadedness, and syncope. Palpitations on assuming the recumbent position is a worrisome symptom for some patients.³ Several genealogies of familial muscular subaortic stenosis have been compiled.^{4, 5} In these families an unusual number of sudden unexplained deaths have occurred in seemingly healthy young people. The mode of inheritance is thought to be Mendelian dominant.

The physical examination reveals no distinctive features such as seen in supralvalvular aortic stenosis.⁶ Patients with hypertension and outflow obstruction are thought to represent a different disease complex and are excluded from the IHSS

group. The pulse in IHSS rises rapidly in early systole but is not as bounding as in aortic insufficiency. The apex of the heart is frequently lateral to the mid-clavicular line. In addition to the ventricular impulse a palpable atrial gallop may be present and is called a double apical impulse. Forty-two per cent of the patients in one study had an apical systolic thrill. A systolic ejection type of murmur in the second and third left intercostal spaces is the most consistent finding. This murmur rarely radiates into the aortic or neck region with any degree of intensity. A diastolic murmur may be present but is infrequent and a distinct systolic ejection click is not found in IHSS.

CARDIOMEGALY SEEN

Radiological and electrocardiographic studies reported in the literature show that in 70 per cent of the patients, routine chest roentgenograms revealed cardiomegaly. The electrocardiogram of patients with IHSS exhibited a sinus rhythm and atrial fibrillation was rare. Abnormal P waves were present in 50 per cent of the patients with sinus rhythm. Although a few cases of Wolff-Parkinson-White syndrome have been reported, most patients had normal P-R intervals.² Left bundle block frequently occurs after surgery, but in the preoperative state the QRS duration is usually normal.⁷ Braunwald² found Q wave abnormalities in 56 per cent of 123 patients. Some observers believe that the hypertrophied septum is the reason for this change and have attempted to localize the area of greatest enlargement by this electrocardiographic pattern. As would be expected, 70 per cent of the patients in this same study had electrocardiographic findings of left ventricular hypertrophy.

CHARACTERISTIC PATTERNS

Although some of the cases of IHSS have elevated pulmonary artery pressures, the most specific finding is the gradient between the left ventricle and the subaortic area. The catheter-withdrawal tracings in IHSS have a characteristic pattern. As the recording point passes distal to the muscular obstruction in the ventricle the diastolic pressure remains fixed, but the systolic pressure decreases. On withdrawing the catheter into the aorta, the systolic pressure remains constant, and the diastolic pressure becomes elevated.²⁸ Isoproterenol has been used to demonstrate a ventricular gradient in suspected cases that could not be proven in the conventional manner.⁹ It was also found that methosamine, a sympathomimetic

SUBAORTIC STENOSIS / Hatten

amine, given intravenously, abolished the ventricular gradient. The arterial pressure pulse in muscular subaortic stenosis has a characteristic configuration. The peak arterial pressure is reached in less than one-tenth of a second from the beginning of isotonic contraction and falls sharply in mid-systole just as the left ventricle is reaching its peak pressure, only to rise to a second peak as the left ventricle prolongs its contraction.⁸ The first peak in the tracing is called a "percussion" wave, and the second wave is referred to as the "tidal" wave.¹⁰

Criley has observed several patients in whom a significant left ventricular gradient was present, but in whom, outflow tract obstruction was not seen by left ventricular cineangiocardiology. The cardiac muscle in these patients is abnormally thick and the left ventricle empties more rapidly than normal; therefore, a "hypertrophic hyperkinetic cardiomyopathy" is present.¹¹ To complicate matters even further, the gradient can vary from day to day and even be affected by body position. Braunwald demonstrated an increase in the subaortic gradient by tilting the patient head up, 45 degrees. The gradient was reduced by lowering the patient, head down, 20 degrees, or elevating the legs.¹³

VENTRICULAR GRADIENT

Angiocardigrams alone cannot be used to make the diagnosis of IHSS without previous knowledge of the presence of a ventricular gradient. The thickened left wall of the ventricle encroaches upon the inferior portion of the outflow tract, giving it the shape of a cone with its base at the aortic valve. The cone is sharp in appearance during systole and truncated during diastole. The cavity of the left ventricle has been observed to be narrowed by the increased muscle mass but there is little or no longitudinal contraction.¹²

Successful surgical treatment of IHSS has been reported by closed transventricular instrumental dilatation, open simple ventriculomyotomy,¹⁴ and excision of obstructing muscle mass through the left atrium¹⁵ or left ventricle.¹⁶ Morrow reported 10 cases treated surgically with one postoperative death.¹⁷ In six patients a ventricular gradient was absent at rest and on exercise, but the gradient could be demonstrated by infusion of isoproterenol. Surgical complications which have been encountered are as follows: left bundle-branch block, heart failure, sudden death, mitral insufficiency, uncontrollable bleeding, complete heart

block, aortic incompetence, ventricular fibrillation, and ventricular aneurysms.¹⁸

HEMODYNAMIC DISORDER

The classical medical armamentarium of digitalis and nitroglycerin serve only to intensify the hemodynamic disorder of IHSS. Braunwald¹⁹ demonstrated that in patients with IHSS the left ventricular end-diastolic pressure and mean left atrial pressure rose significantly following ouabain administration; that cardiac output either fell or remained unchanged and the systolic pressure gradient between the left ventricle and the brachial artery rose. Propranolol (Inderal), a Beta-adrenergic blocking agent has been useful in treating IHSS. Long-term oral propranolol therapy has been of significant symptomatic benefit in patients with latent and labile outflow obstruction and is considered the treatment of choice in these groups. In the more severe forms of IHSS, propranolol may produce an increase in symptoms.²⁰

COMMENT

Since the murmur, in the patient presented, was known to exist prior to the onset of symptoms of angina pectoris, the diagnosis of papillary muscle dysfunction would be unlikely.²¹ Other disease processes with similar findings such as valvular aortic stenosis, mitral regurgitation, ventricular septal defect and functional murmurs have to be excluded by cardiac catheterization.

The history and physical findings in IHSS are characteristic but not diagnostic. There is still justifiable controversy as to the cause of the pressure gradient in the left ventricle in certain cases, especially if the obstruction cannot be demonstrated by angiographic studies. The therapeutic modalities, both surgical and medical, are at best only moderately successful.

SUMMARY

A patient with IHSS who gave a history of a murmur for 17 years and symptoms of angina pectoris for two years is presented. A positive double Master's two-step was obtained and seemed to support a diagnosis of arteriosclerotic heart disease with angina pectoris. The initial catheterization did not demonstrate the defect. However, it was apparent on second study. ★★★

1600 Monroe St. (39180)

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GROSS AND MICROSCOPIC

There are some very small towns in Mississippi. In one such community, a favorite pastime on Saturday night is to go to the local motel and see who rented the room. In fact, this community is so small that it has only one yellow page in the telephone directory.

Changing Methods And Changeless Principles

WILLIAM K. KELLER, M.D.
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A WORKABLE QUOTE concerning history says, in effect, that those who refuse to read or attempt to understand history, are doomed to relive it. The Greeks, at the time of the Republic, have a great counterpoint in segments of America today. They believed that troublemakers, dissidents, and other nonconformists should simply be annihilated. They were rarely interested in segregation or integration, only permanent removal of the insurgents and even of some of the too radical thinkers. Socrates wrote of the group of young people who had no apparent goal in life, were dissolute in mind and body, and had no respect for "the establishment," their elders, and, rather especially, their own parents.

When Rome was at the peak of its power in the then known world, it was certainly as affluent as American society is now. Some believe it was the most affluent civilization ever, but they had their have-nots. As the easy life came to more and more people, the incentive to work, to be responsible for one's self, or to care for anyone else, decreased in proportion. Eventually, people being what they are, the division between the haves and the have-nots became greater, and those who had more got more and those who had less got less. This readily led to a greater dissatisfaction among the have-nots, who began to demand a greater share of the affluence and less responsibility for the acquiring of worldly goods. One group even demanded, and got, back payment for past injustices. Eventually, to capsule significantly, the have-nots developed a leadership which did indeed obtain for them a greater and greater share of what was around and things

changed radically. In short, Rome fell. There are parallels aplenty, but modern leadership must do its homework in history to find short cuts to today's seemingly new and overwhelming problems.

"Methods change; principles never do," said the Rev. William Slider. The author elaborates on this axiom, concluding that while medical techniques may change, the principles set down by Hippocrates remain the same. He advises physicians to stand firm by these ideals while advancing the science and art of medicine as far as humanly possible.

In the magazine section of the Louisville *Courier Journal and Times*, June 15, 1969, there was an article entitled "All Right, Youth, Make Something of It," written by John Ed Pearce, a father of five, who lived through the depression and the world's worst war. With his permission, I will quote from it, for I feel he has stated the case so very well:

"I have heard and read a great deal lately from you young people about your disillusionment with your world, your society, my generation. You complain that you have been dumped into a society of war, poverty, injustice, and prejudice. We have been so materialistic, you say, that we have forgotten the real values of life—love, fairness, peace, and brotherhood. As a result of our greed and timid conformity we have missed life, and in the process have left you a mess

From the Department of Psychiatry, University of Louisville School of Medicine.
Read before the Mississippi Psychiatric Society, Jackson, Nov. 22, 1969.

that can only be righted by destroying it and building better on the rubble.

"I don't see it quite that way. I offer no apologies for my generation. I am proud of it, and of what we have built on the foundation left us. I hope you will do as well. You will if you will leaven your zeal with a little humor, your egotism with a little history, and ask why your insistence on universal love seems so often to express itself in hate for those who differ with you.

"We have given you a basically sound world; imperfect, full of flaws springing from human imperfections, but strong, dynamic and exciting.

"It is strange that yours should be the most favored generation in history and yet the most self-pitying.

"You speak of poverty, but you have never been really hungry.

"You are angered—and you should be—about unemployment, poor job opportunities for Negroes, economic injustices, dishonesty in government, the Vietnam war.

"The failings of the past do not justify those of today, of course. But a realistic comparison reveals a continuing progress that is not a symptom of a sick society.

"Because of our so-called materialistic greed, you are the biggest, tallest, healthiest, brightest, handsomest generation to inhabit this land, and perhaps the world. You are going to live longer, suffer sickness less often, work fewer hours, learn more, see more of the world's grandeur and have more choice of your life's undertaking than any generation before.

"Please try to evaluate the progress made in the last 20 years in all these areas and to see how decently we fell into the unwanted Vietnam war. We do worry about you because you seem more intent upon destroying the system than in correcting it. Your interest in violence resembles the storm trooper more than the reformer. Are the ideals of liberty and justice for all less inspiring because we, being human, fall short of them? We think not, but it is in the field of social relationships that we, like all before us, have fallen shortest of the goal. We have developed weapons that can end all life (nuclear power can be made to serve man as well as destroy him) and the questing mind cannot be asked to draw back from knowledge because it may prove dangerous.

"We have not found an alternative to war. Perhaps you can perfect the social

mechanism so that all men may, without the threat of force, pursue their course, in which we will no longer need laws or police to enforce them, or armies to prevent men of one belief from trespassing against others, though the violence with which you protest violence justifies little hope that you will.

"It is good to know what went on before so that you can better decide where you want to go. The apple does not fall very far from the tree and the traits you have inherited are those on which you must depend as you build your world."

GLIMMER OF HOPE

All is not lost, however. The following is an excerpt from a letter written by a young college drop-out from his duty station aboard an aircraft carrier off Vietnam:

"Dear Mother and Dad:

". . . While I am slowly growing older chronologically and physically, I am moving by leaps and bounds emotionally. The Navy has forced or drawn from me and brought to the surface something which has always been a part of me, but unfortunately never utilized constructively. I am speaking of my inheritance. I sincerely believe I am constantly developing many traits and habits which are personal assets and essentials to any young person set on success in a challenging business world and our fast changing social environment.

"I thank everyone in our family for the examples they set, and now it is my turn to outline some goals for myself to prove that your love and guidance have been wise investments.

"With much love,
"Bill"

SQUARE ASTRONAUTS

One wonders if there is any significance in the fact that the first American in space and the first man to set foot on the moon were both real squares—complete with conformity, happy marriage, family formation, education, religion, and haircuts—who, in their youth, had even been Eagle Scouts!

The world is bigger, there are more people, there is outer space, and the atomic bomb, but the problems and the principles involved remain the same.

The University of Louisville School of Medicine still requires the recitation of the Hippo-

CHANGING METHODS / Keller

cratic Oath upon graduation. It has been modified a tiny bit, but, in essence, it is the same oath which has been in use for more than 2,500 years. Its survival is due to the fact that the principles which it contains remain the same today as they were 25 centuries ago. In Greece, when Hippocrates and his colleagues formulated this oath, there were no instant communication, satellites, television, or automobiles and super-highways, but they managed, in an infinitely smaller area, to pass the word, to differ, to kill, and to get themselves killed. There were changes, a growing commercial effort, a changing social picture, and confused political ideologies. There were rivalries among the Greeks which resulted in street fighting wars between sections. The armies of Persia were not as far away as Vietnam; they were poised on the very perimeter of the Greek states. All these things were going on when the Oath was formulated. As the Rev. William Slider said, "Methods change; principles never do."

HIPPOCRATES' PRINCIPLES

Hippocrates made many astute observations, and many are just as valid today as they were when he first set them down. Some of his conclusions were and are correct, most are not. Some suggested causes of disease and remedies are hopelessly erroneous, but the principles attendant upon patient care are the same. Hippocrates would hardly believe a recounting of a heart transplant and probably would question the sanity of a colleague who described an artificial kidney, but it is quite certain he would be very involved and interested in the ethics surrounding such procedures. The society in which we practice, the terms we use, the information available, the advanced equipment—all these have changed since the day of the Greek physician, but the ideals, the principles which created the society in which medicine has come to its greatest achievement, the fundamentals of the system which brought about the technical skills and the humanitarian drives which have made medicine what it is today—these are unchanged. In an era which is crying to overturn everything, in an age which is sneering at all that has gone before, it is well to remember that what is true of medicine is true of all else.

ONLY METHODS CHANGE

New ways of doing things and new solutions for problems may be found but these are all es-

entially technical or mechanical. Physicians must not be caught up by the transient voices which point to the discoveries and the technical advancements in the medical profession and say that since these outer things are changing, all must change. It is the physician's responsibility to combine the new and the old; in some things it is deadly to hold back and refuse to move out, and in others it is just as fatal to attempt to change, to destroy or to replace. The physician's responsibility must be to guard constantly the basic morality brought down to us from the Island of Cos so many hundreds of years ago. The Temple is gone, the landscape has changed, all the teachers are long dead, but the ideal is still here, and a thousand years hence, when the moon is a colony and Mars a staging base for an assault upon the galaxies, it is certain that physicians will be able to take the same oath and its words will be as meaningful as today. All medical science and all the physician's skills cannot make man happy, secure, or make him at last immune to death. It is that other dimension to dealing with patients which strives to achieve these things, and its essence is in that ancient vow. It is the need of mankind for affection, respect, and for hope, and finally for the courage to make the last trip when art and science have finally failed. Indeed, methods change, but principles never do.

QUESTIONING ATTITUDE

It is the physician's responsibility further to remain concerned with the plight of his fellowman and he must be his brother's keeper. However, this effort must remain in his field of competence. If physicians do not retain a healthy questioning attitude toward their patients and themselves, they will surely wind up with a series of pat and, to them, acceptable answers, firmly convinced that the world is almost entirely populated with "neurotics." "He has eyes and sees not"—this description just must be a properly directed scold to all of us. In terms of time, the fact that blood circulated was discovered only yesterday; yet how could it not have been apparent for so long? Who looked and didn't see?

My father, who was a general practitioner, had a notebook of his lectures at the University of Louisville in 1893. In one place, under the heading "Malaria" there is this notation: "Malaria is a very debilitating disease, caused by a miasma which arises from swampland in the summer, after dark. The symptoms are of an acute onset of chills, followed by a high fever, then a profuse sweat. The treatment is quinine sulphate,

gr. V every three hours for six days, then . . . etc."

PHYSICIAN OMNISCIENCE

It is an amusing fantasy to wonder how many physicians around the world took careful histories and made many observations to come up with the fact that this disease only occurred in patients who had been out at night, around swampland, in the summertime. They even knew how to cure it. But the most fun is to conjure up an image of those same astute physicians standing on the edge of some watery area, at night, in the heat, and seeing only the miasma arising as they swatted mosquito after mosquito.

How many mosquitoes are being swatted today while a physician decides in his own omniscience that this particular patient's problems and symptoms arise from some familiar miasma.

No other branch of medicine is given—or takes—credit for so much knowledge about everything as does psychiatry. We psychiatrists know what causes unrest, revolt, hippies, draft card burnings, racism, crime and just about everything else which is wrong in the world. We have fostered a permissiveness with a plea for "understanding" which makes most any kind of behavior understandable, and consequently acceptable. Not all of us are guilty, of course, but too many are.

Psychiatry's professional jargon has been loosed on the world in a completely unbridled manner. Psychiatrists are often flattered by an inquiry into making some really rather silly pronouncements which have nothing to do with personal experience, knowledge, or training. They give first their opinion as a human being based

upon some experience with a few people who may or may not have had the same or similar problems. How much does training in medicine fit them to know how to cure the political, cultural or sociological ills of the world? They should be involved and concerned and help in every way, but stick to their lasts as regards real knowledge beyond their training and experience. They should leave many educated guesses to others. Psychiatry has not cleaned its own Augean stables in spite of all its Herculean efforts. They are still too full for comfort or complacency. Schizophrenia is still around, you know.

If one asks the average psychiatrist how to build a cantilever bridge, he may tell you of the cantilever principle, but then withdraw into a happy fortress of avowed ignorance concerning the technical knowledge required to do the job. Ask him what causes racism, crime in the streets, juvenile delinquency, student unrest, and then get out of the way, for here it comes! Then ask him what to do about it and you will get more answers. Be kind and don't ask him why these problems continue to increase in spite of his Olympian understanding.

Psychiatrists must learn to rely on those who are trained and capable in a specific area to do a special job. Publicity concerning the discipline has been so great that psychiatrists have begun to believe it themselves. The simple phrase "I don't know" rusts from lack of use. It seems that we would be well advised to get hooked on some "humble pills" and stick to the business of being a physician. Indeed, methods change, but principles never do. ★★★

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TREAD LIGHTLY

A hippie presented himself at the physician's office, attired in the way-out regalia of the cult. The receptionist, noting his wearing only one shoe, asked:

"Did you lose a shoe?"

"No," retorted the hippie, "but I just found one."

Radiologic Seminar XCIII: Inferior Vena Cavography

OTTIS G. BALL, M.D.
Jackson, Mississippi

THIS IS A SIMPLE, safe, and often very informative procedure that can be performed fairly quickly and requires no special equipment.

It is helpful to incorporate this study with excretory urography for evaluation of pelvic or abdominal masses, particularly in infants and children. However, it is also useful in adults as an aid to determine the extent of lymphomas, carcinoma of the uterus, prostate, testicle, and colon. Conceivably, it may also be helpful in evaluation of tumors of the liver and pancreas.

The inferior vena cava returns to the heart blood from parts below the diaphragm. It is formed by the junction of the two common iliac veins on the right side of the fifth lumbar vertebra. It is usually straight, and lies slightly to the right of and parallel to the lumbar spine (see Fig. 1 A and B). It occupies about 15 per cent of the retroperitoneal space. Lymphatic vessels and nodes draining the pelvis and abdomen are in juxtaposition to the inferior vena cava through its course in the retroperitoneal space. The right kidney and adrenal gland border on its right lateral aspect. The right renal artery often produces a sharp indentation on the posterior border of the inferior vena cava at the level of the second lumbar vertebra. The second and third portions of the duodenum and the head of the pancreas lie against the anterior border. The caudate lobe of the liver may impinge upon the vessel superiorly and anteriorly.

Inferior vena cavography is performed by in-



Figure 1A. Anteroposterior view of opacified inferior vena cava. Note washout effect (arrow) due to entry of renal vein.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Mississippi Baptist
Hospital.

serting a 17 or 18 gauge needle or a catheter into one or both femoral veins and injecting 30 to 50 cc. of 50 per cent Hypaque, or its equivalent, rapidly. First, a cross-table lateral exposure is made with the patient in a supine position. This is done so that contrast media will be present in the urinary tracts and visualized in relationship to the vena cava on the anteroposterior projection. A second injection is performed and an anteroposterior view is obtained.

Figure 2 is an AP view of an inferior vena cavogram that reveals extensive venous obstruction and blockage of the right ureter. This was a sixty-two year old white male patient with edema of the scrotum and right lower extremity. Biopsy of a pelvic node revealed lymphosarcoma. Cobalt therapy was given to the pelvis and retroperitoneal node areas. The venogram furnished



Figure 1B. Lateral view of opacified inferior vena cava with stippled borders added for easier identification. Again, note defect (arrow) due to entry of renal veins and posteriorly located renal artery defect.



Figure 2. Complete obstruction of right common iliac vein with extensive collateral circulation. Note non-functioning right kidney and normally functioning left kidney.

an adequate guide for the placement of cobalt ports. A repeat study four weeks following radiation therapy showed a patent right iliac vein and vena cava and a functioning but somewhat small right kidney.

In summary, inferior vena cavograms are easily performed procedures that are helpful in evaluation of the retroperitoneal space in regard to primary or metastatic tumors involving the lymph nodes or other structures in this area. They are simpler than lymphangiography as a means of assessing retroperitoneal lymph nodes. They are more informative than gastrointestinal studies or intravenous urography alone. ★★★

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The President Speaking

'Or Lose by Default'

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THERE HAS NEVER been a time in American history that has seen more drastic changes brought to the health care delivery system. Never has American medicine been under such attack as it is now. Lost in this rush for change is the fact that Americans enjoy the best medical care in the history of the world. Those who would socialize American medicine and make physicians servants of the state are hard at work as never before.

The next big push towards socialism will be made in an effort to bring about compulsory national health insurance for all Americans. AMA's answer to this move is a voluntary system of tax credits, which has been labeled Medicredit. Looming on the horizon, probably in 1972, is a great debate over these plans. It is necessary that physicians inform themselves well in every aspect of these plans so that they may effectively contribute to the debate. Much informative material is being published at intervals in the JOURNAL and in many other medical publications.

The nature of a physician's work tends to isolate him from environments that actively consider the socioeconomic aspects of these plans. It is, therefore, necessary that we make an extra effort to become well informed on these major issues, or lose by default to those who would remove free enterprise from the practice of medicine.

★★★

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EDITORIALS

Invasion of Privacy: New Angle on Smoking

I

THE JUMBO JETS opening a new generation of travel, Pan Am's Boeing 747's, bring back memories of the great trains of the 1920's. As in the wonderful old Pullman car, there are sections of the big plane in which smoking is not permitted.

The Wall Street Journal reports that since non-smoking President Nixon's first press conference, these hitherto smoke-filled room sessions have been tobacco-free. Consumer crusader Ralph Nader has petitioned the Federal Aviation Administration and the Interstate Commerce Commission to prohibit smoking altogether on air lines and busses. He also wants puffing outlawed in hospitals and other public accommodations.

The U. S. Air Force surgeon general has issued orders forbidding smoking by any hospitalized patient, and no USAF hospital or BX in a hospital complex sells cigarettes. And conspicuously missing among vending machines at the Mississippi State Medical Association's headquarters building in Jackson are those dispensing tobacco. We'll take your dime for a Coke, cookies, peanuts, and candy bars, but tobacco products are unavailable. Smoke if you've got them, but we won't help.

II

These are signs of the times catching up to the long suffering of nonsmokers caught in a

tobacco smog. Antismoking advocate John Banzhaf, III, of Washington, the young attorney who forced the free equal time for the case against smoking on television (ASH: Mild Label for a Singeing Movement, J.M.S.M.A. X:99-100 (March) 1969), uses lawsuits to hang up no smoking signs in elevators, public transportation, and facilities deemed to be in interstate commerce.

In fact, Mr. Banzhaf now heads a second organization called CRASH. That's "Citizens to Restrict Air Line Smoking Hazards." His original organization which shook up the TV industry is ASH, "Action on Smoking and Health." Nor are his words falling on deaf ears, because the U. S. Public Health Service, in partnership with FAA, has initiated a one year study of the effects of tobacco smoke on air line passengers.

One such important passenger, according to *The Wall Street Journal*, was no less than the non-smoking Chief Justice of the United States, Warren E. Burger. The Chief Justice was on a flight from Washington to Minneapolis when he was literally overcome by fellow passengers' puffing away. He got off the plane at Madison, Wis., spent the night, and finished his trip the next day.

Chief Justice Burger wrote the president of the air line but according to *WSJ*, didn't command the courtesy of a reply. A subsequent letter to

FAA brought the Supreme Court chief a prompt response from the administrator.

III

The new and militant movement against smoking in public accommodations and especially in cramped, close transportation situations has both legal and medical overtones, and these are interrelated. Some individuals are allergic to tobacco smoke, and nearly all nonsmokers find it offensive in varying degrees.

So for those to whom smoke may not be a health hazard of immediate consideration there may be a legal remedy. Messrs. Nader and Banzhaf contend that uncontrolled smoking constitutes an invasion of privacy. Moreover, it is contended that all have a right to breathe air uncontaminated by tobacco smoke.

Sen. Mark Hatfield (R., Ore.) and Rep. Andrew Jacobs (D., Ind.) have introduced bills in the Congress to restrict smoking aboard public transportation. The measures will doubtless have the unremitting support of many physicians, if a sampling of the letters to *American Medical News* recently against smoking in airplanes is any bellwether.

Italian investigators claim that free, uninhaled fumes from cigarettes may constitute a health hazard to nearby nonsmokers. They argue that during the mean burning time of a cigarette which is 12 minutes, it is inhaled only 24 seconds, leaving more than 11 minutes of smoke production for the distress of in-range nonsmokers.

IV

In a letter to Sen. Hatfield, reports *WSJ*, a manufacturer of the new big jet aircraft said that electronic pressure controls are now being used instead of the old pneumatic controls. The plane maker said that the electronic controls are adversely affected by tobacco tar. While FAA has yet to identify a hazard to air materiel operations safety attributable to cigarettes, we may reasonably postulate that they don't help in the slightest.

Society has become acutely consumer conscious, and *caveat emptor* is fast changing to *caveat vendor*. The smoker has no particular claim on anybody else's airspace, and the fact of the matter is that man's natural state is *not to smoke*. Most would, however, seek a reasonable solution to the annoyances and vexations of the

puffer of the el hempo corona in the hotel elevator before breakfast, even if one of four elevators had to be dedicated to the polluters of air and lungs.

We wish smokers no ill, for they have enough woe already. We simply wish nonsmokers well with as much fresh air as is currently available. In fact, common courtesy should make laws, regulations, and lawsuits quite unnecessary as America slowly comes to its senses about tobacco and health.—R.B.K.

A Punitive Bill Aimed at Physicians

At a time when the professional liability picture in the United States is darkest, House Bill 407 has been dropped in the hopper of the Regular Session of the Legislature at Jackson. The measure, by Reps. James Simpson of Pass Christian and Charles Bullock of Gulfport would, if passed, eliminate the requirement for corroborative medical testimony in proof of negligence, failure to exercise reasonable care, caution, or professional skill.

The bill would permit awards to plaintiffs in malpractice suits against physicians "by juries on the basis of (nonmedical) testimony offered in evidence, notwithstanding any precedents established by any decision heretofore rendered."

The net result is to deny the defendant doctor part of his defense, and nobody is foolish enough to believe that plaintiffs in these cases now have the laws and courts stacked against them. What this bill does is introduce into our Mississippi law books the liberal doctrine of *res ipse loquitur* (the thing speaks for itself).

If passed, House Bill 407 could cause the premium on professional liability insurance for physicians in Mississippi to zoom as it has in other states. The ultimate, extreme consequence would be to drive this vital insurance coverage from the market.

In California where the laws are liberal and the courts are more so, physicians pay anywhere from \$2,500 to \$20,000 a year in professional liability insurance premiums. It is almost a rule of thumb that the coverage costs around \$1,500 in most other states. We have been extremely fortunate in Mississippi, because we have the lowest premium in the nation.

This is not to say that physicians are ganged up against lawful claims, throttling the courts,

and stacking the deck. Judicial records indicate exactly the opposite. But to erect a climate denying a physician part of his basic right of defense is something else—something which is neither just nor reasonable. This is dangerous legislation with a potentially punitive impact on physicians. It should be defeated.—R.B.K.

Restraining Devices Help Mother Make Sure

The midafternoon traffic near the shopping center is heavy, and mother is tired from a weary day as she heads home with the groceries and her energetic three-year-old standing up on the front seat. This is the setting for tragedy, an accident itching to happen, and one that all too frequently does.

The American Academy of Pediatrics has recently published studies showing that 5,900 children under 15 years of age were killed in motor vehicle accidents in 1969. Many, if not most, would be alive today had mother made sure with a restraining device for the child.

Bassinets, safety harnesses, kid-size lap belts, and a host of devices are readily available, and AAP demonstrates that these provide "the highest degree of dynamic protection" for children in automobiles. The Academy, through its journal, *Pediatrics*, calls on physicians to learn which of the restraining devices to recommend for children according to weight and size.

There is a great deal more to safety restraints for the little people than a bar or a belt. Manufacturers have adopted design concepts which take into account the weight, height, center of gravity, buttocks-knee length, and body composition of the child.

"A device should be constructed with regard to all these factors," say Drs. Frederic D. Burg, John M. Douglass, Eugene Diamond, and Mr. Arnold W. Siegel, writing in *Pediatrics*, "so as to prevent ejection of the child and provide a long, smooth period of deceleration during collision or sudden braking."

The report recommends four classifications of restraining devices for youngsters in an automobile:

—Children from the newborn up to 12 pounds weight should be transported in a rear seat bassinet or car bed held secure in place by front and rear seat safety belts. It is important that the bassinet be parallel to the long axis of the auto-

mobile, with the infant in a feet-forward position. A properly constructed infant carrier may be used in the front seat of a car for children in this weight category in lieu of the rear seat bassinet.

—Children from 12 to 24 pounds should be placed in a properly constructed rear seat safety harness or toddler seat.

—Youngsters ranging in weight from 25 to 50 pounds should be placed in a good safety child seat. The shield-type design is said to afford the greatest protection, although it has the major psychological disadvantage of limiting the child's field of vision.

—Children weighing more than 50 pounds should use the adult lap belt, and where height exceeds 55 inches, the adult shoulder harness should also be worn.

The American College of Surgeons, the major medical pioneer in automotive safety through passenger restraints, says that as many as 10,000 lives may be saved in a year with modern seat belts and shoulder harnesses. It is possible that this figure might reasonably be increased if Junior and Sister are also well-restrained.

Even fatal injuries to infants can happen with just sudden stops and minor traffic accidents. And most fatal accidents, the traffic experts tell us, occur within 25 miles of the victim's home. So this business of rationalizing that "we don't need to buckle up to go to the shopping center" is an invitation to tragedy. Let's take a second to help mother make sure.—R.B.K.

The Inside Story on AMA Membership

Just who among American physicians belongs to the American Medical Association? Doesn't everybody? No, not by a long shot, and medicine's critics have a gleeful field day pointing out that one out of three American physicians isn't a member.

But the facts put an entirely different light on the figures, and they are worth knowing. AMA's Department of Records and Circulation, the membership office, reports that on Dec. 31, 1969, there were 328,366 physicians known to be in the United States. Of this total, AMA had 219,570 on its rolls. If the examination stops here, then somebody is badly indicted.

Exactly 199,997 physicians were in private practice at the year end, and of these 168,082 were members. But the percentage of AMA

members from among those physicians who are eligible is much more impressive. Remember that a physician is AMA-eligible only if he belongs to his state medical association or is a career federal medical office eligible for direct service membership. Of these, 91 per cent are AMA members.

So what about the nonmembers? Obviously, the largest segment is made up of physicians in training, interns and residents. About half of the state medical associations—including Mississippi—provide for their membership on a dues-exempt basis, but most are not on the rolls. The second largest group of nonmembers are those employed full time by hospitals, some 21,167 from among whom only 8,224 are AMA members. Medical school faculties are next with 5,184 on the rolls from a total of 10,817 in the schools.

The record of AMA membership among private practitioners is remarkably good, considering that it is voluntary in 41 of the 54 state and territorial medical associations. Of the states with compulsory AMA membership, New York and California account for more than 50,000 on the rolls.

Trite as it sounds, medicine has never before had a greater need or reason to seek unity. This does not mean that every member should be a rubber stamp for the same viewpoint, but it does mean that all eligible, qualified, ethical physicians ought to be under their own organizational roof. With all of its troubles, AMA still remains the paragon among organizations and associations.

Moreover, AMA is a *confederation* of the state medical associations whose collective will directs its every effort and program. Medicine's house ought to have the family living in it.—R.B.K.

The Old Admonition: Watch Those Narcotics!

Almost every physician grows weary over admonitions about abuse, fraud, and theft of narcotics, and virtually all know the ground rules on safe, sane, and lawful handling of narcotics. But the problem gets worse, not better, and a quick review of the U. S. Narcotics Bureau "Don'ts for the Practitioner" isn't a total waste of time.

The drug-oriented subculture in the nation has not helped the situation in the slightest, and while the vast majority of drug abuse instances

relate to nonnarcotics, there is still a grave and growing problem. The addict is a clever, scheming bundle of determination—a challenge to the most soundly conceived fail-safe methods of preventing narcotic abuse.

The bureau begins with the age-old warning: Don't leave prescription pads lying around in the office or elsewhere. Not a few of us have seen Rx pads conveniently distributed as telephone notepads in clinics and offices. Nor should a physician's supply of narcotics be unprotected.

Pharmacists tell us that there are some few physicians who do not use brackets and spelling when specifying the number of dosage units to be dispensed in a narcotic Rx. A hastily written "Morphine HT # 10" can easily become "#100" in the hands of the addict, and many are expert forgers.

Few physicians fall for the simulated symptoms of a condition known to require narcotics, but a patient who can voluntarily produce bloody sputum is not unknown among addicts. Some women addicts have successfully posed as nurses, fraudulently securing narcotics or prescriptions for imaginary patients.

The bureau says that more and more physicians' bags are being stolen from automobiles. A good rule puts the bag in the trunk, and a minimum amount of narcotics are carried in the bag. A record of narcotics dispensed ought to be maintained.



"Go right in, Mrs. Blats . . . he's expecting you."

Don't resent a pharmacist's call for verification of a narcotic Rx—he is responsible for forgeries under federal law. Much of the illicit supply of narcotics can be cut off from addicts with observance of these common sense ground rules. It's an effort worth making.—R.B.K.



March 6, 1970

CURRENT ADVANCES IN MANAGEMENT OF DISEASES OF THE KIDNEY AND THE URINARY TRACT

University Medical Center, Jackson
March 6, 1970, beginning at 8:30 a.m.

Sponsored by the Mississippi Kidney Foundation and The University of Mississippi School of Medicine, Department of Medicine, Division of Urology

Participants:

H. Earl Ginn, M.D., associate professor of medicine, urology and biomedical engineering and chief of the nephrology division, Vanderbilt University School of Medicine, Nashville, Tennessee

Donald B. Halverstadt, M.D., department of urology, University of Oklahoma Medical Center, Oklahoma City, Oklahoma

Eugene C. Klatte, M.D., chairman of the department of radiology, Vanderbilt University School of Medicine, Nashville, Tennessee

Herbert G. Langford, M.D., professor of medicine, The University of Mississippi School of Medicine

Friday Morning

PATHOLOGIC PHYSIOLOGY OF MEDICAL RENAL DISEASE

Dr. Ginn

PATHOLOGIC PHYSIOLOGY OF SURGICAL DISEASE OF THE URINARY TRACT

Dr. Halverstadt

CURRENT TECHNIQUES OF RADIOLOGIC EVALUA- TION OF THE URINARY TRACT

Dr. Klatte

TREATMENT OF PRETERMINAL RENAL FAILURE

Dr. Ginn

Friday Afternoon

RENAL-VASCULAR HYPERTENSION

Dr. Klatte

DIAGNOSIS OF RENAL HYPERTENSION

Dr. Langford

MANAGEMENT OF RENAL HYPERTENSION

Dr. Halverstadt

CASE PRESENTATION, QUESTIONS AND GENERAL DISCUSSION

March 16-20, 1970

NEUROLOGICAL DISEASES AND STROKE INTENSIVE COURSE

University Medical Center, Jackson
March 16-20, 1970, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Participants:

Robert D. Currier, M.D., professor of medicine (neurology) and co-director of the stroke unit, The University of Mississippi School of Medicine

Robert Smith, M.D., assistant professor of neurosurgery and co-director of the stroke unit, The University of Mississippi School of Medicine

Registrants in this one-week intensive course will review management of acute stroke patients, severe head injuries, seizure problems and other neurological and neurosurgical disorders. In addition to seminars, rounds, group discussions, and assigned reading, registrants will participate in the daily care of patients in the Mississippi Regional Medical Program demonstration stroke unit.

March 16-20, 1970

CARDIOLOGY INTENSIVE COURSE

University Medical Center, Jackson
March 16-20, 1970, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Participant:

Patrick H. Lehan, M.D., professor of medicine and Mississippi Heart Association William D.

POSTGRADUATE / Continued

Love research professor of cardiology, The University of Mississippi School of Medicine

This one-week intensive course will familiarize physicians with current concepts in bedside diagnosis of heart disease. Pulse tracings, electrocardiograms, hemodynamic data and other cardiovascular aids will be used to review practical points of physical diagnosis and various forms of heart disease. Participants will witness cardiac catheterizations and join the cardiovascular team's discussion on management of patients.

Both intensive courses will be limited to five physicians from the class of 20 enrolled in the four-year Mississippi Postgraduate Institute in the Medical Sciences, supported by the Mississippi Regional Medical Program and designed by The University of Mississippi Medical Center and the Mississippi State Medical Association.

CIRCUIT COURSES

SOUTHERN CIRCUIT

BILOXI—March 4—Session 3

Bay-Waveland Yacht Club, 6:30 p.m.

LAUREL—March 12—Session 3

Laurel Country Club, 6:30 p.m.

Session 3—Current Approach to Tetanus Prophylaxis and Treatment, Dr. Raymond Martin

Diagnosis and Management of Hypothyroidism, Dr. J. Manning Hudson

EASTERN CIRCUIT

MERIDIAN—March 3—Session 1; April 7—Session 2, Northwood Country Club, 6:30 p.m.

Session 1—Carcinoma of the Cervix

Radiologic Approach, Dr. Bernard Hickman

Surgical Approach, Dr. Richard Boronow

Session 2—Respiratory Failure: Current Methods of Management, Dr. Boyd Shaw

Surgical Management of Emphysema, Dr. William Fain

COLUMBUS—April 28—Session 3

Lowndes General Hospital, 6:30 p.m.

Session 3—Complications Associated with Saddle Block Anesthesia in Obstetrics, Dr. Donald Sherline

The Management of Edema Related to the Kidney, Dr. Ben B. Johnson

SOUTHWEST CIRCUIT

McCOMB—April 7—Session 3

Southwest Mississippi General Hospital, 7:00 p.m.

NATCHEZ—April 21—Session 3

Jefferson Davis Memorial Hospital, 7:00 p.m.

Session 3—Headache

Neurological Approach, Dr. Armin Haerer

Neurosurgical Approach, Dr. Robert R. Smith

FUTURE CALENDAR

March 2-6, 1970

NEPHROLOGY INTENSIVE COURSE

March 3

CIRCUIT COURSE, MERIDIAN

March 4

CIRCUIT COURSE, BILOXI

March 6

RENAL DISEASE SEMINAR

March 12

CIRCUIT COURSE, LAUREL



"Very humorous, Miss Fisher, but just for your information, it isn't another false alarm."

March 16-20

CARDIOLOGY INTENSIVE COURSE
STROKE INTENSIVE COURSE

April 1-3

CARDIOVASCULAR SEMINAR

April 7

CIRCUIT COURSE, McCOMB
CIRCUIT COURSE, MERIDIAN

April 16

MISSISSIPPI THORACIC SOCIETY

April 21

CIRCUIT COURSE, NATCHEZ

April 28

CIRCUIT COURSE, COLUMBUS

May 5

CIRCUIT COURSE, MERIDIAN

May 11-14

MISSISSIPPI STATE MEDICAL ASSOCIATION

blings of English brasses at the Lauren Rogers Library and Museum of Art in Laurel.

CLYDE X. COPELAND, JR., WILLIAM F. OWENS, JR., and L. BUFORD YERGER, JR., all of Jackson, have been inducted as Fellows of the American Academy of Orthopaedic Surgeons at the group's annual meeting in Chicago.

JOE S. COVINGTON and OCTAVIUS D. POLK, both of Meridian, have been named to the General Advisory Council of the Mississippi Medicaid Commission. Dr. Covington will serve as chairman of the Physician's Services Technical Advisory Committee.

ROBERT D. CURRIER, A. F. HAERER, and RICHARD W. NAEF, all of Jackson, have been awarded certificates of merit by the National Council on Epilepsy for service during the past year. The three physicians are members of the board of the Mississippi Council on Epilepsy.

JAMES ROBERT GIFFIN of Louisville has been re-elected to active membership in the American Academy of General Practice upon completing 150 hours of accredited postgraduate work in the last three years.

STANISLAW GRABOWSKI, a native of Poland, has joined the staff at Ellisville State School as a physician in the medical department.

JAMES D. HARDY of Jackson reigned as King of the Junior League's 1970 Carnival Ball in January. The title is given annually to those the League honors for their vital contributions to mankind.

KARL HATTEN of Vicksburg received the Distinguished Service Award of the Vicksburg Jaycees at their banquet at the Downtowner Motor Inn.

MARTHA HAYS of Gulfport is now serving as a full-time clinician at the Harrison County Health Department.

HENRI MELVIN HEDGEWOOD, formerly with the U. S. Navy at Pensacola, Fla., has begun the practice of medicine at Raleigh. The general practitioner is a member of the medical staff of Smith County General Hospital.

JACK C. HOOVER of Pascagoula will serve as president of the American Cancer Society of Jackson County for 1970.

GERALD HOPKINS of Oxford recently spoke on "Heart—the Number One Killer" at the District Five Heart Association's annual Heart Fund dinner meeting at the Water Valley Country Club.

LEMANN BOUNDS of Meridian was recently elected president of the Debonaire Dance Club. Members meet once a month for a buffet dinner and dancing.

PAUL B. BRUMBY of Lexington spoke at the executive board meeting of the Mississippi State Medical Association Auxiliary in Natchez.

DUANE BURGESS and FRED TATUM, both of Hattiesburg, participated in the Jan. workshop on care of the geriatric patient at the University of Southern Mississippi School of Nursing.

CHARLES N. CANNON, formerly of Folkston, Ga., is now practicing medicine and surgery in Philadelphia in the former location of George Day Studios. Dr. Cannon is a graduate of the University of Mississippi School of Medicine.

TEMPLE CARNEY of Meridian has joined the staff of the Rush Medical Group as a general practitioner. Dr. Carney graduated from the University of Mississippi School of Medicine in 1968.

ROBERT E. CARTER and GUY GILLESPIE, both of Jackson, presented a postgraduate circuit course on anemia to physicians in the coastal area and at Hattiesburg recently.

MARION E. COCKRELL of Laurel and his wife exhibited and lectured on their collection of rub-



PERSONALS

PERSONALS / Continued

EDLEY JONES, SR., of Vicksburg has been saluted by the Vicksburg Evening Post as a civic leader holding places of responsibility in the business, cultural and civic life of the city.

DEWEY HOBSON LANE, JR., of Pascagoula has been named Pascagoula's outstanding young man for 1969. The surgeon was selected from six nominees for the award, based on community service.

RAY LEE of Liberty has announced that he will be a Republican candidate for the Third Mississippi District seat in the United States Congress.

LAWRENCE W. LONG of Jackson has been selected to head a state committee to launch a campaign to honor retiring Selective Service director Gen. Lewis B. Hershey. Dr. Long was director of the Selective Service System in Mississippi during World War II.

WILLIAM E. LOTTERHOS of Jackson delivered the dedicatory address at the dedication ceremonies and tour of the facilities of Leake County's new \$600,000 Extended Care Unit at Leake Memorial Hospital.

JOHN MCFADDEN of West Point is currently serving as a director for the West Point Jaycees.

ROBERT L. MCKINLEY, JR., of Tupelo recently appeared on WTUV television as a guest of Mrs. Hugh Purnell on the health program. Dr. McKinley spoke on drugs and narcotic abuse.

PATRICIA MOYNIHAN of Jackson and UMC spoke on Tissue Compatibility before the District Nine Heart Association's annual dinner at the Buena Vista Hotel in Biloxi.

J. R. MULLENS, JR. of West Point was unanimously re-elected to serve another year as Chief of Staff of Ivy Memorial Hospital.

J. K. OATES, JR. of Jackson announces the removal of his office to Suite 482, Hinds Professional Building, 1815 Hospital Drive, Jackson.

J. T. PRESCOTT, formerly of Central Valley, Calif., has begun the practice of medicine in Osyka. He will be affiliated with the Schilling Memorial Hospital there.

CURTIS D. ROBERTS of Brandon has received the insignia of colonel in ceremonies of the Mississippi Air National Guard in Jackson. Dr. Roberts is the first Mississippi Air Guard flight surgeon to reach the rank of colonel.

LEWIS J. RUTLEDGE has joined in a partnership with VERNER S. HOLMES to form the Southwest Mississippi Ear, Nose and Throat Clinic at 405 Marion Avenue in McComb.

ROBERT T. SURRATT of Jackson was named councilor from Mississippi for the American College of Radiology. C. D. BOUCHILLON, III, of Laurel is alternate councilor. Each physician was elected to his post by the Mississippi Radiological Society.

WALTER TREADWELL, RICHARD JOHNSON, BOYD SHAW, and RUSH NETTERVILLE, all of Jackson, recently participated in the 14th annual Tri-State Thoracic Society Case Conference in Biloxi.

NANCY VARNADO of Jackson, Central Medical Society's executive secretary, and ROWLAND B. KENNEDY, MSMA executive secretary, attended the AMA-sponsored meeting of senior medical executives in Chicago.

E. A. WHITE, III of Corinth has been named Outstanding Young Man of 1969 by the Corinth Jaycees at their annual Distinguished Service Award banquet.


JOHN WOFFORD of Greenwood was one of the principal speakers at the "Hearts and Husbands" program sponsored by the LeBonte Woman's Club at the Greenwood Little Theatre. Dr. Wofford is currently serving as president of the Leflore County Heart Association.

WILLIAM L. WOOD, JR. of Tupelo instructed student nurses at Tupelo's Northeast Mississippi Junior College School of Nursing in the techniques of cardiopulmonary resuscitation. Dr. Wood, president of the Lee County Heart Association, limits his practice to internal medicine.


RHEA L. WYATT of Holly Springs has been appointed acting health officer for Lee County to succeed H. K. TATUM, who resigned for reasons of health.



DEATHS

 FOX, JAMES HERMAN, Jackson. M.D., Memphis Hospital Medical College, Memphis, Tenn., 1903; interned U. S. Marine Hospital, Memphis, Tenn., one year; dermatology residency, Jefferson Medical College, Philadelphia, Pa., May 1, 1909-July 31, 1909; postgrad-

uate study, Mar., 1945; member MSMA Fifty Year Club; Emeritus member of MSMA; died Jan. 8, 1970, age 89.

 WINGO, OLIVER BRYSON, Sardis. M.D., University of Tennessee College of Medicine, Memphis, Tenn., 1943; interned Norwood Hospital, Birmingham, Ala., one year; pediatric residency, same, nine months, 1944; deceased Jan. 31, 1970, age 51.

ation, New Orleans, La., July 1, 1966-June 30, 1969; elected Jan. 13, 1970 by West Mississippi Medical Society.

FULCHER, LUTHER HARRISON, JR., Jackson. Born Jackson, Miss., Jan. 25, 1937; M.D., Tulane University School of Medicine, New Orleans, La., 1963; interned Charity Hospital, New Orleans, La., one year; medicine residency, same, July 1, 1964-June 30, 1967; elected Nov. 4, 1969 by Central Medical Society.

GOODLOW, WILLIAM HENRY, JR., Jackson. Born Siloam Springs, Ark., Jan. 31, 1936; M.D., Tulane University School of Medicine, New Orleans, La., 1962; interned Confederate Memorial Medical Center, Shreveport, La., one year; obstetric and gynecology residency, City of Memphis Hospitals, Memphis, Tenn., July 1, 1966-June 30, 1969; elected Nov. 4, 1969 by Central Medical Society.

HICKERSON, OTTIE BERTRELLE, Jackson. Born Coffeyville, Kan., Mar. 17, 1936; M.D., Howard University College of Medicine, Washington, D. C., 1962; interned Kings County Hospital, Brooklyn, N. Y., one year; psychiatry residency, Mental Health Institute, Independence, Iowa, July 1, 1963-June 30, 1966; elected Nov. 4, 1969 by Central Medical Society.

The following physicians have been elected to membership by their respective component Medical Societies in the Mississippi State Medical Association and the American Medical Association.

BENNETT, KENNETH RHOMA, Jackson. Born Tyler, Texas, July 27, 1933; M.D., University of Texas Southwestern Medical School, Dallas, 1962; interned Confederate Memorial Medical Center, Shreveport, La., one year; medicine residency, same, Nov. 15, 1964-June 30, 1965; medicine residency, University Medical Center, Jackson, Miss., July 1, 1963-Jan. 31, 1964 and Sept. 1, 1966-June 30, 1967; cardiology fellowship, same, July 1, 1967-June 30, 1969; elected Nov. 4, 1969 by Central Medical Society.

COCKRELL, MARION EVERETT, JR., Laurel. Born West Point, Miss., July 14, 1937; M.D., Tulane University School of Medicine, New Orleans, La., 1962; interned Charity Hospital, New Orleans, La., one year; obstetric and gynecology residency, same, July 1, 1963-June 30, 1966; elected Dec. 18, 1969 by South Mississippi Medical Society.

COLLINS, REX WILSON, Laurel. Born Memphis, Tenn., Nov. 10, 1938; M.D., University of Mississippi School of Medicine, Jackson, 1963; interned Duvac Medical Center, Jacksonville, Fla., one year; dermatology residency, University of Arkansas Medical Center, Little Rock, July 17, 1966-July 16, 1969; elected Dec. 18, 1969 by South Mississippi Medical Society.

EDERINGTON, JOHN BAYLISS, Vicksburg. Born Warren, Ark., Aug. 2, 1937; M.D., Tulane University School of Medicine, New Orleans, La., 1963; interned Baptist Hospital, Nashville, Tenn., one year; ophthalmology residency Ochsner Foun-

April Course on Physiology Set

The American College of Physicians and the American Physiological Society will present a seminar on current concepts in physiology of the gastrointestinal, endocrine, and respiratory systems on April 9-11, 1970, at the Holiday Inn in Philadelphia, Penn.

Director of the course is Dr. Daniel H. Simmons, F.A.C.P. Fees for members and residents and research fellows is \$60.00. Fee for nonmembers is \$100.00.

The course is limited to no less than 50 registrants and no more than 300.

All registration, requests for information, and applications should be sent to: Dr. Edward C. Rosenow, Jr., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Penn. 19104.

Simultaneous Vaccinations Studied at MSBH

Field investigations and experience are showing that for several live virus vaccine combinations administered simultaneously at different inoculation sites, safety and immunologic response are not significantly altered as compared to single administration of these agents at monthly intervals, reports the Mississippi State Board of Health.

An example is the third dose of trivalent oral poliovirus vaccine which is commonly given at the time of smallpox vaccination during the second year of life. In addition, DPT or Td toxoids may be given with good effect at the same time. Studies in progress indicate that it may be feasible, safe and efficacious to simultaneously administer such combinations as measles and smallpox; mumps, measles and rubella; and measles, mumps, smallpox and oral trivalent poliovirus vaccines.

When considering the simultaneous administration of 2 or more live virus vaccines each combination must be individually assessed for safety and efficacy as no general rule applying to any and all combinations can be formulated from our present data. Relatively new and recently licensed vaccines will be singly assessed for possible untoward reactions before combined use with other agents is considered and studied.

AMA Establishes Specialty Department

The American Medical Association established a new headquarters staff department Jan. 22 to strengthen liaison and services to related medical organizations. It is the Department of Specialty Society Services, reporting directly to Dr. Richard S. Wilbur, assistant executive vice president. Department Director is Theodore R. Chilcoat, Jr., a five-year staff member formerly assigned to the AMA Washington Office.

The Department will serve and implement the directives of the Interspecialty Committee which was created in 1966. On the same date, Jan. 22, Dr. Ernest B. Howard, AMA executive vice president, announced that Dr. Wilbur was appointed secretary of the Committee, succeeding

Dr. Hugh H. Hussey, who was appointed director of the AMA Division of Scientific Publications and editor of the *Journal of the American Medical Association* Jan. 1.

Commenting on the new appointments, Dr. Howard said, "The establishment of this special department is an important step in strengthening AMA's relationship with the specialty societies, and it is the culmination of a long range program undertaken to upgrade the services of the AMA to the specialty societies.

"After the founding of the Interspecialty Committee, the House of Delegates appointed an Ad Hoc Committee to Study the Modus Operandi of the Sections of the House of Delegates. Its report, prepared under the direction of its chairman, Dr. William F. Quinn, a Los Angeles surgeon, called for the creation of a group of section councils to provide specialty societies with direct representation in the AMA House of Delegates. The report was adopted in July, 1969.

Its specific recommendations were to:

—"Establish a mechanism for stimulating increased cooperation between the specialty medical societies and the AMA, thus forging a relationship that will bind specialty societies and the AMA closer together, generating a singleness of purpose which will benefit all of medicine;

—Give more satisfactory representation in the House of Delegates to the specialty organizations;

—Provide for an increase in experience and competent manpower to assist the Council on Scientific Assembly in developing the Association's Annual Convention scientific program;

—Generate stimulating and engaging interdisciplinary and specialty-oriented programs which will command the interest of greater numbers of practicing physicians;

—Provide a direct and continuing liaison between a section and its corresponding specialty societies;

—Permit specialty societies direct access to the House of Delegates through their appointed delegates, and

—Give AMA specialty sections recognized status by identifying them directly with the specialty societies."

The Department's responsibilities, under the direction of Mr. Chilcoat and a staff aide, are to assist Dr. Wilbur in his secretarial services to the AMA Interspecialty Committee, further liaison with specialty groups, and advance the development of the section councils of the House of Delegates.



Book Reviews

Essentials of Gastroenterology. By J. Ned Smith, Jr., M.D., and Kyo R. Lee, M.D. St. Louis: The C. V. Mosby Company, 1969.

This textbook is a concisely written one, covering practically every aspect of gastroenterology. The text begins with the history and physical examination, and carries one through different pathological entities of the gastro-intestinal tract. Special interest is given to the radiological aspect of gastro-intestinal pathology.

Chapter XIII, which deals primarily with the liver, is a superbly written chapter that begins by discussing the basic physiology of the liver and continues through the management of different hepatic diseases, such as hepatitis, cirrhosis, bleeding varices, etc.

One of the splendid features of this book is the excellent illustration of all the pathological entities by well chosen x-ray films, which demonstrate the discussed diseases.

This book would be of interest to all physicians, regardless of specialty. I strongly recommend that this book be made a part of every physician's library.

C. A. MARASCALCO, M.D.

Plastic and Maxillofacial Trauma Symposium. Edited by Nicholas G. Georgiade. 221 pages and 390 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$25.00.

The Educational Foundation of the American Society of Plastic and Reconstructive Surgeons holds regular, planned symposia for its members, candidates, and friends in related specialties. This (Vol. I) is a condensed presentation of the proceedings of the society held at Walter Reed General Hospital on Nov. 30-Dec. 2, 1967. It is regrettable that the slightest portion of any presentation had to be deleted, but for the sake of time and space and to avoid repetition, only the "meat of the cocoanut" was published.

The editor, Nicholas G. Georgiade, D.D.S., M.D., F.A.C.S., is professor of plastic and maxil-

lofacial surgery, Duke University Medical Center, Durham, N. C. He is greatly interested in trauma to the head and neck and is particularly adept at organizing a book of this scope. Thirty of America's leading plastic and oral surgeons and ophthalmologists have contributed short, scholarly articles on problems thoroughly researched and presented from first-hand knowledge and experience. The papers are accurate as to content and contain very few typographical errors. Clarity of content was enhanced by diagrams and sketches in addition to the many rather good black-and-white photographs.

The subject matter was divided into eight major categories following the foreword written by one of America's oldest practicing plastic surgeons, Dr. Robert H. Ivy. Part I was moderated by Dr. Clifford L. Kiehn of Western Reserve University. First-hand knowledge was given by plastic surgeons on active duty in Vietnam as to medical services, evaluation of missile wounds, management of military maxillofacial wounds and care of civilian casualties of war.

Part II was moderated by Col. Wilfred T. Tumbusch of Walter Reed Hospital, Washington, D. C., dealing with general considerations of the problem of maxillofacial trauma. This included resuscitation following maxillofacial trauma, casualty examination and triage and anesthesia for the combat casualty.

Parts III through VII were presentations of the mandible, maxilla, nose, zygoma, and soft tissue repair. Each section was expertly handled with an introduction of the problems involved and a review of the anatomy and physiology closely involved. At the end of each major section was presented a question and answer round table. This was apropos in giving everyone a chance to present his own particular problem from back home for consideration of the experts. Part VIII presented trauma problems of special consideration. In it were included particular experiences of the author in treating facial fractures in children, late complications of facial injuries and injuries to the facial nerve, trauma to the laryngo-trachea, and immediate mandibular repair in "blow-out" jaw injuries.

LITERATURE / Continued

This book should make a decided addition to the library of anyone treating trauma, be it acute, delayed, or of such severity that complicated staged procedures will have to be done. Many general surgeons and general practitioners far removed from medical centers are required, not by choice, to treat a certain amount of facial trauma. Parts I, II, and VIII would give these men added self confidence. Further points of technique may be gleaned from the remaining chapters and also help to establish one's psychology of management, i.e. what, when, and to whom shall I send the cases beyond my field of competence.

I found this book rewarding and worth the time and effort of reading. I hope that the Educational Foundation will see fit to continue publishing each of its trauma symposia. And to quote Dr. Robert H. Ivy, "I hope it will fulfill the primary educational purpose intended, serve to add definition to the respective fields of endeavor of the specialties, and involve and foster cooperative efforts of care in the best interests of the patient."

MARTIN B. HARTHCOCK, M.D.

Sheen Award Deadline Announced

The American Medical Association has announced that the closing date for receiving nominations of physician-candidates for the Dr. Rodman E. Sheen and Thomas G. Sheen Award is March 15. Nominations received by this date will be examined by a committee of physicians named by the AMA Board of Trustees.

Candidates must be American citizens possessing an M.D. degree who have made outstanding contributions to medicine; however, these contributions need not have been made in only the year preceding the nomination, nor need these activities have been conducted within the United States. The award can recognize either a single achievement in medicine or an accumulated career of excellence.

Nominations for the annual \$10,000 award will be accepted from state and local medical societies, medical specialty societies, medical research organizations, medical schools, hospital medical staffs, public health agencies at all levels of government, and other appropriate military or civilian agencies.

The award was established under a bequest in the will of Thomas G. Sheen, an Atlantic City, N. J., businessman, as a memorial to his brother, Dr. Rodman E. Sheen, whose career was cut short by a Roentgen tube explosion. The trustee of the estate and dispenser of the award funds is the Guarantee Bank and Trust Company of Atlantic City, which invited the AMA to establish and conduct procedures for selecting and presenting the award.

Announcement and presentation will be made June 21 in Chicago during the AMA Annual Convention.

Previous recipients are Drs. Irvine H. Page, Cleveland, O., and Robert E. Gross, Boston, Mass.

The nominations, in writing, should be addressed to The Sheen Award Committee, AMA, 535 North Dearborn Street, Chicago, Ill. 60610.

Pre-Addressed Labels Speed Tax Refunds

Income tax refunds can be processed quicker if taxpayers put the pre-addressed name label that came on their 1040 tax package onto the return they file, J. G. Martin, Jr., District Director of Internal Revenue for Mississippi, said today.


Use of the name label will eliminate many errors in name and Social Security numbers that held up refunds last year.

Returns filed before April 1 using the name label can usually be processed and the refund issued in five to six weeks. Taxpayers who find an error in their name label should correct the label and use it on their return.

When a return is prepared by someone else, the taxpayer should remember to put the name label on the form he actually files. Taxpayers should either give the tax preparer the form with the name label attached, or attach the name label themselves when the completed form is returned to them for signing.

The name label is sometimes called the piggy-back label because a carbon copy of the information appears beneath the label. If you do not file the return mailed you, the top label can thus be lifted off and put on the return you do file.

Martin said taxpayers required to file estimated tax declarations should use the pre-addressed form sent them by IRS.



thing
relief for
ir-raising
cough

Benylin[®] EXPECTORANT

Each fluidounce contains: 80 mg. Benadryl[®] (diphenhydramine hydrochloride), Parke-Davis; 12 grains ammonium chloride; 5 grains sodium citrate; 2 grains chloroform; 1/10 grain menthol; and 5% alcohol. An antitussive and expectorant for control of coughs due to colds or of allergic origin, BENYLIN EXPECTORANT is the leading cough preparation of its kind. BENYLIN EXPECTORANT tends to inhibit cough reflex... soothes irritated throat membranes. And its not-too-sweet, pleasant raspberry flavor makes BENYLIN EXPECTORANT easy to take.

PRECAUTIONS: Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this preparation. Hypnotics, sedatives, or tranquilizers if used with BENYLIN EXPECTORANT should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENYLIN EXPECTORANT.

ADVERSE REACTIONS: Side reactions may affect the nervous, gastrointestinal, and cardiovascular systems. Drowsiness, dizziness, dryness of the mouth, nausea, nervousness, palpitation, and blurring of vision have been reported. Allergic reactions may occur.

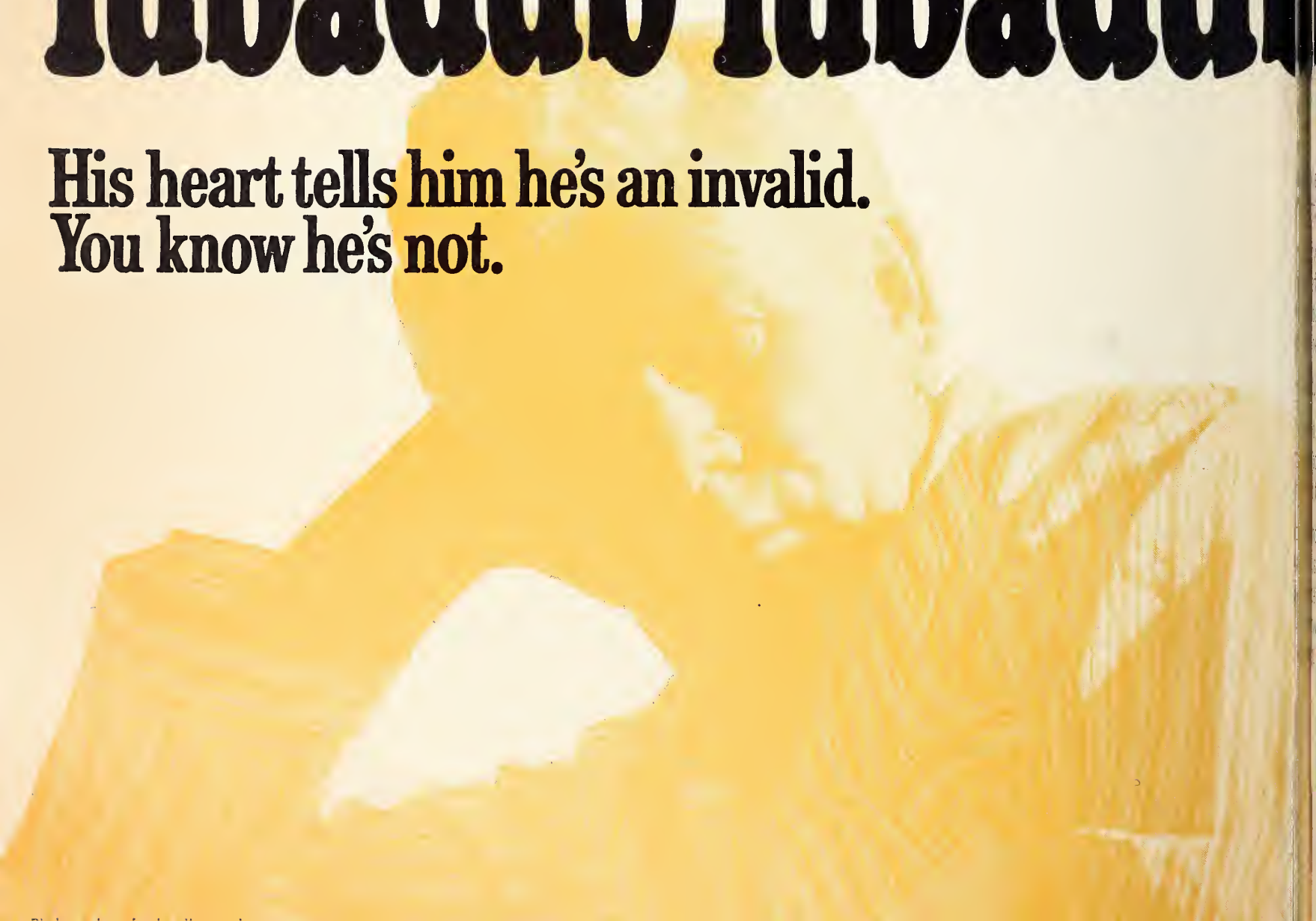
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**His heart tells him he's an invalid.
You know he's not.**



Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis,

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ety is expected in the cardiovascular patient. tle may even be desirable.

when anxiety is exaggerated . . . when it rferes with sleep . . . when it aggravates iiovascular symptoms, your help may eeded.

urally, you'll want to reassure the patient.

perhaps prescribe Equanil (meprobamate) djunctive therapy. It helps relieve anxiety ension specifically, yet gently.


ost 15 years' use has shown that Equanil ually well tolerated as well as effective. e effects are generally limited to transient vssiness; serious, therapy-interrupting e effects are rare.

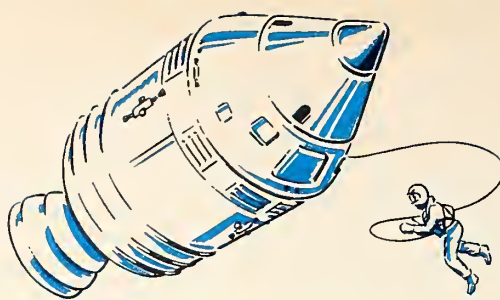
stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

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(meprobamate) 



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . a prophylaxis to prevent kidney or bladder calculi.

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Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages

complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.



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MEDICAL ORGANIZATION

Annual Session Is Set for May 11-14; Scientific Work, Fun, Elections on Agenda

The association's 102nd Annual Session may be the biggest thing to hit the Gulf Coast since Hurricane Camille—but with exactly the opposite effect. The May 11-14 scientific, social, business, and fellowship gala will be headquartered at the Buena Vista Hotel and Motel at Biloxi.

Drs. James L. Royals, president, and Walter H. Simmons, chairman of the Council on Scientific Assembly, said that the House of Delegates will meet on Monday, May 11, with the Scientific Assembly opening on the following day.

The Woman's Auxiliary has scheduled its 47th Annual Session May 11-13, also at the Buena Vista, according to Mrs. Louis C. Lehmann of Natchez, state president.

Concurrent meetings include more than 12 specialty groups and four medical alumni orga-

nizations. Technical and scientific exhibits will be presented in the headquarters hotel.

Meeting in general sessions, the Scientific Assembly opens on Tuesday morning with surgery, and obstetrics and gynecology is set for the afternoon. A joint session Wednesday morning features general practice and preventive medicine, while internal medicine occupies the afternoon program.

The final day is divided between scientific work and business with eye, ear, nose, and throat and the pediatrics programs running concurrently in the morning. The adjourned meeting of the House of Delegates is set for the afternoon.

Medical alumni occasions kick off with Ole Miss on Monday evening. Tennessee, Tulane, and

THE BUENA VISTA HOUSING PICTURE

Although heavily hit by killer Camille, the Buena Vista was one of the few Coast businesses and institutions which never lost a day following the hurricane. The original motel complex around the pool was destroyed, but the new and modern high-rise unit was virtually undamaged.

The main hotel, modernized and refurbished during the past two years, sustained damage only at ground level where the coffee shop, Marine Room, and WLOX-TV studios were located.

A crash rebuilding program in the original motel complex is underway, and some units may be available for the 102nd An-

nual Session. The association will, however, be able to anticipate a shortage of 75 to 100 rooms.

To offset this headquarters hotel room shortage, representatives of exhibiting organizations will be assigned housing at the White House, and first priority for Buena Vista rooms will be reserved for members and families. Nearby modern, air conditioned rooms are available for overflow.

The association advises all who plan to attend the annual session to secure reservations at the earliest moment to assure confirmation in the hotel of personal choice.

ORGANIZATION / Continued

Vanderbilt are set for Tuesday, and the association party and dance is on the ticket for Wednesday.

Twenty-five vacancies in elected offices will be filled on May 14 at the final meeting of the House. The long ballot will be announced by the Nominating Committee on May 13, according to Dr. William E. Lotterhos of Jackson, speaker of the House, and John B. Howell, Jr., of Canton, vice speaker.

Dr. Paul B. Brumby of Lexington will be inaugurated president for 1970-71 during closing ceremonies.

The Board of Trustees will meet daily during the annual session, said Dr. Mal S. Riddell, Jr., of Winona, Board chairman. Serving with him in leadership positions this year are Drs. J. T. Davis of Corinth, vice chairman, and William O. Barnett of Jackson, secretary.

Offices to be filled by the delegates on May 14 are:

President-elect

Nominate three, no two of whom may be from the same county, elect one.

Vice Presidents

Nominate three for the Northern Area, three for the Mid-State Area, and three for the Southern Area. Elect one for each area.

Secretary-Treasurer

Term 1970-73. Nominate three, elect one. Incumbent: Walter H. Simmons, Jackson.

Speaker of the House of Delegates

Term 1970-73. Nominate three, elect one. Incumbent: William E. Lotterhos, Jackson.

Vice Speaker of the House of Delegates

Term 1970-73. Nominate three, elect one. Incumbent: John B. Howell, Jr., Canton.

Associate Editor

Term 1970-72. Nominate two, elect one. Incumbent: George H. Martin, Vicksburg.

Delegate to AMA

Term Jan. 1, 1971-Dec. 31, 1972. Nominate two, elect one. Incumbent: Howard A. Nelson, Greenwood.

Alternate Delegate to AMA

Term Jan. 1, 1971-Dec. 31, 1972. Nominate two, elect one. Incumbent: Stanley A. Hill, Corinth.

Board of Trustees, Districts 1, 2, and 3

Terms 1970-73. Nominate two for each district, elect one for each district. Incumbents: John M. Alford, Greenwood, District 1; James O. Gilmore, Oxford, District 2; and J. T. Davis, Corinth, District 3.

Council on Budget and Finance

Term 1970-73. Nominate two, elect one. Incumbent: Daniel L. Hollis, Biloxi.

Council on Constitution and By-Laws

Term 1970-73. Nominate two, elect one. Incumbent: Arthur E. Brown, Columbus.

Judicial Council, Districts 7, 8, and 9

Terms 1970-73. Nominate two for each district, elect one for each district. Incumbents: J. P. Culpepper, Jr., Hattiesburg, District 7; Leo J. Scanlon, Jr., Natchez, District 8; and James T. Thompson, Moss Point, District 9.

Council on Legislation, Districts 4, 5, and 6

Terms 1970-73. Nominate two for each district, elect one for each district. Incumbents: Paul B. Brumby, Lexington, District 4; George E. Twente, Jackson, District 5; and Guy T. Vise, Meridian, District 6.

Council on Medical Education

Term 1970-73. Nominate two, elect one. Incumbent: Frederick E. Tatum, Hattiesburg.

Council on Medical Service, Districts 7, 8, and 9

Terms 1970-73. Nominate two for each district, elect one for each district. Incumbents: Charles R. Jenkins, Laurel, District 7; Jack A. Atkinson, Brookhaven, District 8; and Bedford F. Floyd, Gulfport, District 9.

Mississippi State Board of Health

No vacancies will occur in 1970 among physician-members.

ICS Schedules 17th Congress in Paris

The International College of Surgeons will hold its 17th World Congress in Paris at the Maison de la Chimie on April 19-25, 1970.

The clinical meetings will feature presentations on cardiac surgery, gynecology, orthopaedics, thoracic surgery, ENT, ophthalmology, radiology, urology, oncology, gastro-intestinal surgery, and other specialized areas.

Clinical conferences throughout the week will be held at the different hospitals in Paris.

For further information write: Expositions et Congrès 22, rue Royale. Paris (France).

Technicon Announces AutoAnalyzer II

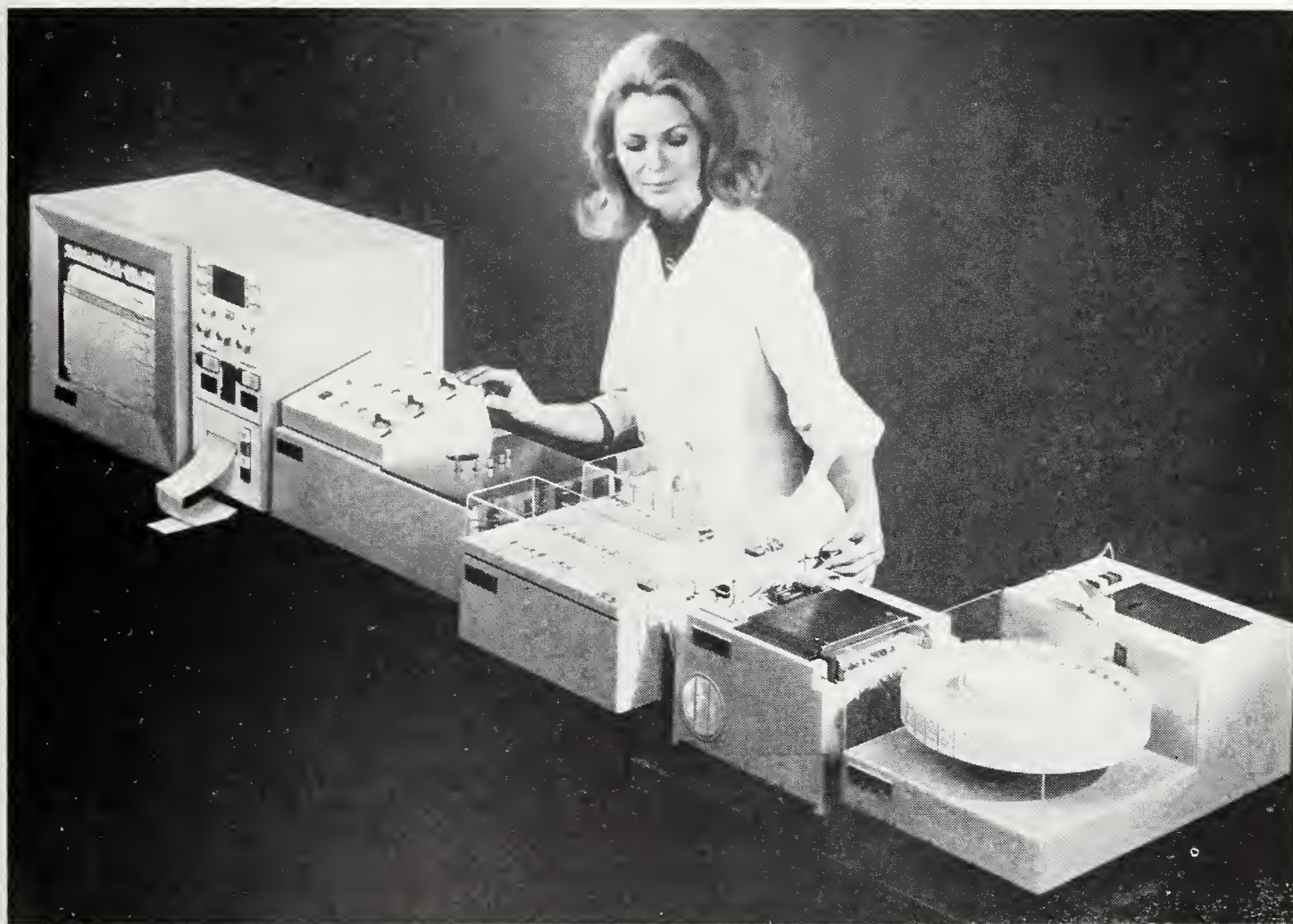
Technicon Corporation, producers of the world's first automated system for wet chemical analysis, has announced AutoAnalyzer® II, the second generation of the AutoAnalyzer family. "In 1957, Technicon introduced the AutoAnalyzer and established a new standard for chemical analysis," commented Edwin C. Whitehead, president of Technicon. "We have every confidence that the impact of AutoAnalyzer II will be as great."

The basic AutoAnalyzer was quickly adopted by hospital laboratories, already feeling the pressures of increasing workloads and diminished staff. Research and industrial labs followed suit, and soon laboratories throughout the world were not only depending upon the AutoAnalyzer, but were also developing new methodologies for applying it to their special analytical problems.

Now, the years of experience with AutoAnalyzer systems, the advanced technology that produced Technicon Sequential Multiple Analysis (SMA)® systems, and the increasingly sophisti-

cated demands of AutoAnalyzer users have come to fruition with the development of AutoAnalyzer II, a new species of basic analytical system. AutoAnalyzer II combines the many virtues of the first generation instrument with innovative features of the SMA systems to offer a compact, fast, accurate, and flexible instrument for use in medicine, research, and industry.

Whitehead explained that an important advance in AutoAnalyzer II is its capacity to achieve, and record results at, "steady state," a condition of equilibrium in the flowcell in which all effects of possible sample interaction have been eliminated and the recorded signal is a true reflection of the constituent being measured. Other advantages described by Whitehead are the new digital printer incorporated in AutoAnalyzer II, which makes the instrument compatible with *any* hospital computer system (giving physicians immediate access to results in conjunction with other vital patient information stored in the computer); increased rates of analysis (in some cases doubling previously achievable speeds); single point calibration (minimizing operator effort and also increasing the total number of samples run per hour by reducing the number of standards



Technician is shown with Technicon's new AutoAnalyzer II, a new species of basic analytical system.

ORGANIZATION / Continued

per tray); and flexibility (interchangeable "cartridges" are available for each chemical analysis).

"We anticipate an immediate response from clinical laboratories," Whitehead said, "where there is a critical need for rapid and accurate analysis of blood and other physiologic fluids." Through the simple substitution of analytical cartridges, complete with a unique "timed" reagent pack specific to each analysis, a variety of procedures may be performed.

With AutoAnalyzer II as many as three analytical procedures may be run simultaneously, providing multi-test capability. This is a very significant feature for small labs, because it increases their total analytical capability with a minimum of expense. In large labs where SMA systems are already in use, AutoAnalyzer II enables users to dedicate from one to three analytical channels to those tests that must be run repetitively. The small sample size required for analysis in AutoAnalyzer II is important in the clinical lab, particularly in the case of pediatric or geriatric patients, or the critically ill.

"While the adoption by research and industrial labs may take a little longer, we know that the versatility, accuracy and speed of AutoAnalyzer II, combined with its capacity for continuous, unattended operation, will prove very attractive to them. We are proud of AutoAnalyzer II for many reasons," Whitehead continued, "one of the most important being that it demonstrates Technicon's continuing dedication to the development of the world's finest instruments for automated chemical analyses."

Alabama Names New Psychiatry Chief

Dr. Patrick H. Linton has been named professor and chairman of the department of psychiatry, University of Alabama School of Medicine.

The announcement was made by the dean of the School of Medicine, Dr. Clifton K. Meador, who said that Dr. Linton's appointment is effective immediately.

Dr. Linton has served as acting chairman of the department since Aug. 1968, following the resignation of Dr. James Sussex.

Dean Meador said "Dr. Linton has been most

effective as acting chairman for the past 15 months; we are pleased to have him confirmed as chairman. Psychiatry has emerged as one of the leading disciplines of the School of Medicine. It is anticipated that the department, under his skilled leadership, will be greatly enlarged and strengthened in the months to come."

Prior to joining the UAB faculty in 1961, Dr. Linton served as staff psychiatrist with Veterans Administration Hospitals in New Orleans, Topeka and Fort Lyon, Colo. He was acting chief of the Psychiatric Service at the Birmingham VA Hospital from 1962 till 1968.

A graduate of Birmingham-Southern College (1949), Dr. Linton received his M.D. degree from the Medical College of Alabama (1953), served his internship at the U.S. Naval Hospital in Jacksonville, Fla. (1953-54), and his residency in psychiatry at the Menninger School of Psychiatry, Topeka (1954-56, 1958-59).

A native of Lineville, Ala., Dr. Linton also holds the appointment of associate professor of dentistry, University of Alabama School of Dentistry.

Alabama Medicaid OKs Mississippi M.D.'s

Physicians located along the eastern border of the state may participate in not one but two Medicaid programs. Through an arrangement between the Mississippi State Medical Association and the Alabama Medical Services Administration, border county physicians are eligible to care for Alabama Medicaid patients.

Sam T. Hardin, Jr., of Montgomery, staff administrator in the Alabama Medicaid office, has informed the association that a single letter from a Mississippi physician can complete the arrangement.

Mississippi M.D.'s interested in qualifying for Alabama Medicaid participation should write Alabama Blue Cross, 930 S. 20th St., Birmingham 35205, requesting assignment of an Alabama Medicaid registry number. Applicants should give their full names, professional address, city and ZIP code and their permanent Mississippi medical license number. Claim forms may be secured from this agency.

The opportunity is open to any licentiate in the state but will be particularly applicable to easternmost members of the Northeast Mississippi, Prairie, East Mississippi, South Mississippi, and Singing River medical societies.

Cancer Quiz

Cancer Committee
University Medical Center
Jackson, Mississippi

THIS FEATURE, consisting of review questions related to the cancer field, was prepared by Dr. Myron Lockey of Jackson, member of the Cancer Committee, University Medical Center. Answers appear on a separate page.

Questions from readers related to these review questions may be submitted to the Editors of the JOURNAL for forwarding to the committee. Each will receive a personal reply. Suitable questions from readers will be considered for publication. This second presentation relates to laryngeal cancer.

Comment and suggestions are invited from readers.—*The Editors.*

1. The disease predominantly affects males in the ratio of:
A. 2:1
B. 3:1
C. 4:1
D. 8:1
2. The most common variety of tumor is:
A. Adenocarcinoma
B. Squamous Carcinoma
C. Sarcoma
3. Carcinoma of the vocal cord is characterized by early metastasis to the neck.
True
False
4. Persistent ear pain without ear pathology may represent carcinoma of the larynx.
True
False
5. The clinical staging of carcinoma of the larynx helps very little in the clinical management of such cases.
True
False
6. The most frequent presenting complaint in carcinoma of the larynx is throat pain.
True
False
7. A patient with hoarseness and a neck node requires biopsy of the neck node.
True
False
8. The treatment of choice for lesions limited to a vocal cord without loss of cord mobility is:
A. Surgery
B. Radiation
C. Chemotherapy
9. In large lesions of the larynx preoperative radiation therapy followed by immediate surgery is better than either modality alone.
True
False
10. X-Ray tomography of the larynx is very helpful in evaluating extent of lesions involving the larynx.
True
False

(Answers on page 146)

Arts Festival Involves Many Physicians' Wives

Key positions in the Mississippi Arts Festival April 13-19 will be filled by wives of physicians, dentists and others in the medical community of Jackson.

The mammoth cultural presentation—seven days in spring—features national and statewide talent in art, music, drama, dance, and literature. "American Heritage" is the theme of the 1970 production. Centered at the fairgrounds in Jackson, it is sponsored this year for the first time by Mississippi Arts Festival, Inc.

The present five-person executive or production committee was appointed by the Junior League of Jackson, which, with the Civic Arts Council, had sponsored the festival for six years. This is the first festival under sponsorship of the incorporated group.

On the five-person executive committee, of which Mrs. Randolph Peets, Jr., is chairman and Mrs. William L. Crim co-chairman, are three persons identified with the medical community.

Mrs. Albert Meena, whose husband is a Jack-

son surgeon, is secretary; Mrs. Chandler Clover, whose husband is administrator of Doctors Hospital, is promotion chairman; and Mrs. David McNamara, whose husband is sales representative for McNees Medical Supply Company, is treasurer.

Medical wives filling chairman and co-chairman positions on committees are: Mrs. John T. Kitchings, artists arrangements; Mrs. William S. Cook, Flag Pageant; Mrs. James R. Cavett, Jr., mimeograph; Mrs. Clarence Webb, Jr., home-making seminar; Mrs. Thomas Turner, home-making seminar; Mrs. A. V. St. Clair, information booth, American Association of University Women; Mrs. J. O. Manning, arts and crafts exhibition; Mrs. Chester Lake, program;

Mrs. W. C. Shands, youth concerts; Mrs. J. Manning Hudson, youth concerts; Mrs. Henry Webb, mailing; Mrs. Howard Cheek, parking; Mrs. H. M. Fairchild, South Jackson Civic League workshop; Mrs. James D. Hardy, program distribution;

Mrs. Heber Simmons, Old Capitol exhibit; Mrs. Sam Sanders, lighting and hostesses in youth pavilion; Mrs. Noel Toler, fairgrounds; Mrs. Jack Fowler, high school art; Mrs. Palmer Wilks, youth pavilion workshop.

Other involved physicians' wives include Mrs. Jim Hayes, Mrs. Elmer Nix, Mrs. Roland Samson, Mrs. Thomas Kilgore, Mrs. Julian Henderson, Mrs. Alvin Brent, and Mrs. T. E. Wilson, III.

Tickets will be available after March 2 for \$5, \$10, and \$15. They will admit the holder to two evening programs in the Coliseum and one in the city auditorium, all featuring nationally known stars, and to all other activities, including exhibits, art shows, concerts, opera, ballet, children's plays and puppet shows, and the spectacular Flag Pageant by the Pensacola Naval Air Training Station.

Exhibits will be housed in two large buildings. The first will present the Mississippi Art Association's national competition, "Images on Paper"; the high school art contest; and the Festival's sixth annual Arts and Crafts Show. Significant prizes will be awarded in these contests.

The second building will trace "American Heritage" by recreating interiors of shops and homes through five eras: Colonial, Ante-Bellum, Victorian, War Years, and Modern Day. Antiques will contribute to the authenticity of the older decors.

Winners of the statewide children's art competition will be displayed in a town square in the center of the American Heritage Building.



More than 100 wives of physicians, dentists, and related medical service leaders in Jackson will work in key positions for Mississippi Arts Festival April 13-19. Mrs. Randolph Peets, Jr., second from left, is chairman, and Mrs. William Crim, third from left is co-chairman. Mrs. Albert Meena, right, wife of a Jackson surgeon, is secretary; Mrs. Chandler Clover, left, wife of the administrator of Doctors Hospital, is promotion chairman; and Mrs. David McNamara, second from right, wife of a sales representative for McNees Surgical Supply Company, is treasurer.

The Youth Pavilion (formerly children's division) will depict 48 scenes from the nation's birth through space exploration. The scenes will be grouped under the headings "A New Nation Is Born," "A New Nation Emerges," "We Develop Culturally," "War Between the States," "Our Nation Reunited," and "This Fabulous Century."

The Jackson Symphony Orchestra, under the direction of Lewis Dalvit, will not only participate in the evening Coliseum programs but will offer four other concerts during the week. Three of these will be for local and out-of-town sixth grade pupils. The other will be a Saturday morning presentation in the Coliseum for all ticket holders.

Classical musicians from throughout Mississippi will be featured at "The Met," with student artists at "The Mini-Met." Popular talent will be heard in the coffee house.

Personnel from the Pensacola Naval Air Station will present their exciting Flag Pageant, a 30-minute program including band music, narration, costumes, and uniforms of the various armed services in American history.

The University of Mississippi will present the opera "Don Giovanni," and the University of Southern Mississippi will give a children's opera, "L'Enfant et Les Sortilèges" by Ravel.

There will be homemaking seminars in creative stitchery and gourmet cooking.

Nearly 1,000 original manuscripts have been submitted to the literary competition since its beginning in 1967. There are five categories in the senior division for adults and college students: drama, short story, formal essay, informal essay, and poetry. The junior division for high school students includes short story, informal essay, and poetry. Awards of \$100 for senior first places and \$25 for juniors will be made at a literary seminar.

Judges for the literary competition will be Willie Morris, editor of *Harper's* magazine and author of *North Toward Home*, senior formal essay judge; Berry Reese, senior editor for Houghton-Mifflin Publishing Company, senior informal essay; James T. Whitehead, noted poet and faculty member of the University of Arkansas, senior poetry; Dr. Margaret Walker Alexander, author of the novel *Jubilee* and faculty member at Jackson State College, senior short story; Michael Dendy, staff and faculty member of the Dallas Theater Center, senior drama; Dr. William Durrett, Belhaven College, junior informal essay; Barry Hannah, Clemson University, junior short story; and Mrs. Lois Taylor Blackwell, Millsaps College, junior poetry.

More Medicare, Medicaid Regulations Announced

New regulations to make sure that Medicare and Medicaid do not recognize inflated values of profit-making health facilities in paying costs of medical care for the aged were announced by Robert M. Ball, Commissioner of Social Security.

"This is part of the continuing effort to eliminate all possible fiscal loopholes—potential as well as existing—in the operation of these problems," Commissioner Ball said.

The regulations announced deal with both the valuation of depreciable assets and the rate of depreciation the federal government will recognize in reimbursing proprietors for the costs of health care under Medicare and Medicaid.

One change would require that the owner value his depreciable properties at the lowest of three figures: actual cost, fair market value or replacement cost adjusted for depreciation.

The other would forbid the use of accelerated depreciation in the case of all new operators—and of new assets brought into the Medicare program by existing providers of services.

There have not, as yet, been major abuses in these areas, Mr. Ball emphasized. "Although we have made every effort under present regulations to insure that valuations of depreciable assets on fair market value are just that—not the result of a sale at an inflated price." Commissioner Ball said, "the changes will enable us to impose even firmer controls."

Under existing regulations, the operator is allowed to calculate his depreciation at accelerated rates. That is, he can charge off higher costs in the early years and lower ones in the later. Over the long run these balance out and the cost to the government in reimbursement is not greater. But if a facility using accelerated depreciation is sold in the early years, the government can require an adjustment in the higher costs it has paid for this period.

Nevertheless, increasing and widespread speculative activity in these properties poses a future threat that overall fair market value may become inflated. Using actual replacement cost (less depreciation) as a ceiling on valuation should insure that this threat does not materialize and adversely affect government reimbursement, Commissioner Ball emphasized. He gave this hypothetical illustration of the situation the new regulations are designed to prevent.

A nursing home operator has \$700,000 invested in buildings and equipment and another

ORGANIZATION / Continued

\$50,000 in land. On the \$700,000 of depreciable property, he is now allowed to take accelerated depreciation and include this in his costs. Fifteen per cent of his beds are occupied by Medicare patients. A corresponding share of his depreciation is allowed in the base for the cost settlement Medicare makes with him at the end of the year.

Should he sell the buildings, equipment and land after 2 years for \$1,000,000, the revised regulations would prevent the new owner from automatically valuing his facility at this amount and thus qualifying for a higher cost base on which to calculate his depreciation. Instead, he would be required to use the lower figure of replacement cost less depreciation.

Assuming, in this case, that the replacement cost of the depreciable assets (but not the land) has risen in the 2-year period by 12 per cent, the new owner's cost basis for purposes of depreciation would come to \$784,000, less two years straight-line depreciation, based on a 40-year life, of \$39,200. This would amount to \$734,800 rather than the \$950,000 he paid (apart from land). With respect to the proportion of the extended care facility devoted to Medicare patients this would mean a difference in cost basis of \$32,280, or some \$807 a year on a 40-year depreciation schedule.

The new regulations would also tighten recovery provisions significantly in the case of capital gain on the sale of a facility. The Social Security Administration would be required to recover the difference between the amount allowed under accelerated depreciation and what this would have been on a straight-line basis.

The regulations would also extend present provisions governing gains or losses on sales of depreciable assets to apply to sales that occur within a year after the original proprietor ceased to participate in the Medicare program.

In addition the proposed changes would tighten the rules relating to return on equity. Under the law, the provider is paid a rate of return (currently about 9 per cent) on his equity—the amount of his own, as opposed to borrowed, money invested—in the proportion that the facilities are used for Medicare basis. This, too, is limited by a fair value base. By using replacement cost (if this is lower) rather than fair market value, the threat of overall market value inflation is eliminated.

The proposed new rules are expected to be

published in the *Federal Register* in the near future. Interested parties will have 30 days to submit data, comments and arguments before the regulations are made final.

Dr. McCaskill Acquitted of Abortion Murder

A Coahoma County Circuit Court jury has acquitted Dr. Luther W. McCaskill of Clarksdale of murder in the 1967 abortion death of Mrs. Emma Flowers Hurt of Greenwood.

Dr. McCaskill pleaded not guilty and testified that Mrs. Hurt told him she received an abortion from a Greenwood doctor before he saw her.

The physician was convicted on the charge in August 1968, but the state Supreme Court ordered a new trial because of improper jury instruction.

Dr. McCaskill now faces trial in the abortion death of another woman and abortion charges in the cases of two others, according to press reports. He has been serving a sentence in the Mississippi Penitentiary at Parchman on abortion conviction.

St. Dominic Elects Medical Staff

A new Medical Staff has been elected at St. Dominic-Jackson Memorial Hospital. Dr. Robert E. Tyson is Incoming Chief of Staff and Dr. Rush E. Netterville is Past Chief.

Secretary is Dr. Thomas E. Stevens and Dr. William B. Thompson is Chief Elect. Dr. Tyson and his officers will serve for two years instead of one year as has been customary.

Section Chiefs, who with the Secretaries, will each serve three years, have been named as follows: Dr. Hardy B. Woodbridge (general practice) with Dr. Charles Wright as secretary; Dr. John W. Evans (medical) with Dr. William E. Bowlus; Dr. William B. Wiener (obstetrics-gynecology) with Dr. Blanche Lockhard; Dr. James C. Griffin (surgical) with Dr. R. E. Dunn; Dr. D. H. Draughn (pediatrics) with Dr. J. Lee Owen; and Dr. L. C. Hanes (psychiatry) with Dr. S. Ray Pate.

Ole Miss Pharmacy School Ups Standing

The University of Mississippi School of Pharmacy awarded the fourth highest number of doctoral degrees in the nation in 1968-69, according to a report released this month.

Ole Miss was topped only by Purdue University, 20 doctoral degrees; University of Wisconsin, 17; and Buffalo University, 13. The number of Ole Miss graduate students receiving Ph.D. degrees in 1968-69 was eight.

Author of the report is the American Association of Colleges of Pharmacy. Included were summations from 74 institutions in the United States and four affiliates in Canada.

"One of the crucial tests of an academic institution revolves around the awarding of doctoral degrees, not only on a numerical basis but also qualitatively," explained Dr. Charles W. Hartman, dean of the Ole Miss School of Pharmacy.

"In this respect, and using as a standard the report of the American Association of Colleges of Pharmacy, our standing is better than ever before. Our attempts to develop pharmaceutical industry in Mississippi will be greatly enhanced by our strong graduate program."

Dean Hartman also noted that undergraduate enrollment in the School of Pharmacy reached 357 in September, highest in the history of the School.



Among current doctoral students at the University of Mississippi School of Pharmacy, which awarded the fourth highest number of doctoral degrees in the nation in 1968-69, are (from left) Everett Solomons of Alston, Ga.; Tony McBride of Lakeland, Fla.; John Holbrook of Austell, Ga.; and Ed Moreton of Gulfport.

In the continental United States 4,046 undergraduates received the bachelor of science or the bachelor of pharmacy degree during 1968-69, an increase of 280 or 7.4 per cent over the previous year.

Otolaryngology Council Opens Headquarters

The American Council of Otolaryngology has opened its national headquarters with offices at 1100 17th Street N.W., in Washington, D. C. John E. Bordley, M.D., of Baltimore, is executive director and Wesley H. Bradley, M.D., Syracuse, N. Y., is consultant and assistant to the executive director.

The Council was founded September 1968, in the District of Columbia to represent the patient care interests of the nation's estimated 6,000 otolaryngologists (ear, nose and throat specialists).

A general assembly has been created by the Council to provide a "grass roots forum" in which the individual specialist may be heard. Representation is secured in the assembly from supporting otolaryngologic societies and academies on all levels, regardless of size.

The American Council is the first national body designed specifically to represent otolaryngology through the development of national programs for improved patient care, greater educational opportunities and to further research. It now serves as the national voice of otolaryngology.

National health problems in the specialty field of otolaryngology, national manpower needs in both medical and para-medical areas, development of new training programs, assistance of these programs in the residency and postresidency levels are all a part of the objectives of the Council.

Dr. Bordley is Andelot Professor Emeritus of Laryngology and Otology, The Johns Hopkins University School of Medicine, and professor of environmental medicine, division of audiology and speech.

Dr. Bradley is clinical associate professor of otolaryngology at the State University of New York, Upstate Medical Center, Syracuse, N. Y.

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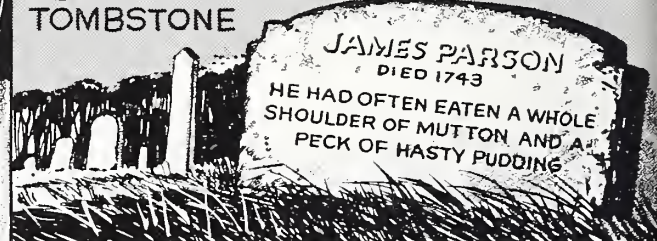
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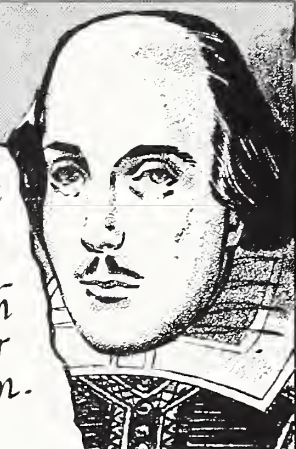
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HE WROTE...

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than for other men.*



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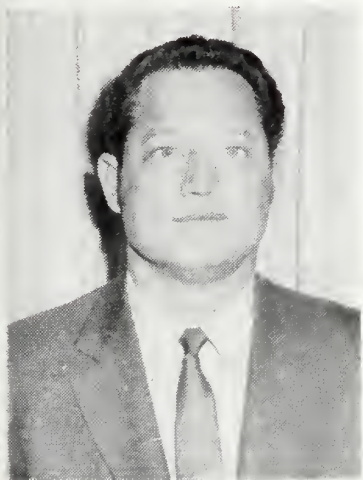
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Blue Plans Promote Mr. Gilliland

Max Gilliland, who joined Blue Cross-Blue Shield in the Physicians and Hospital Relations Division last July, has assumed responsibilities for the south Mississippi territory. Professional Affairs in this territory had formerly been handled by Gerald Franciskato, who is now manager of the Physicians and Hospital Relations Division.



Mr. Gilliland

Prior to his association with Blue Cross-Blue Shield, Mr. Gilliland was business manager for Rush Foundation Hospital and the Rush Medical Group in Meridian. He is a native of Meridian.

The Physicians and Hospital Relations Division is headed by W. C. Mosley, vice president of Hospital and Physicians Affairs. Director of the program is C. T. Walker.

Five Care Facilities To Be Sued

The Social Security Administration has recommended that the Justice Department bring civil suit against four extended care facilities and a two-hospital corporation for the return of wrongfully collected Medicare payments, Robert M. Ball, Commissioner of Social Security, announced today.

Ball also noted that Medicare payments to another 13 extended care facilities were suspended after a social security investigation showed that the institutions had billed Medicare for services not medically necessary, and for services of questionable rehabilitation or therapy value. There was also billing for services which did not meet the definition of skilled care in the Medicare law, Ball said.

The amount of overpayments received by the 13 institutions is estimated at \$1,636,000. Some of this money has already been repaid and steps have been taken to recoup the rest, Ball noted.

The five civil suit cases were referred to the

Justice Department after evidence was found that the institutions, located in Florida, New York, Arizona, and Illinois, had collected overpayments for Medicare patients in an amount that could reach as high as \$2,257,600, Ball said.

In a series of "validation" visits begun last March, Ball said, on-site inspections of institutions participating in the Medicare program were conducted to check on the validity of payments made by Medicare intermediaries.

These program validation visits were supplemental to the regular contract performance reviews the Social Security Administration conducts in the offices of the intermediaries, such as Blue Cross, Blue Shield, and private insurance organizations which receive and pay Medicare bills under contract to the Social Security Administration.

Commissioner Ball noted that one out of every 12 elderly persons discharged from a hospital, but still needing skilled nursing care on a continuous basis, is admitted to an extended care facility under Medicare. There are about 40,000 such admissions every month, after an injury or illness requiring hospitalization for three days or more.

The average Medicare posthospital stay in an extended care facility averaged 50 days in calendar 1969 and payments totaled between \$400 million and \$450 million for the year.

To assist the Medicare contractors, the Social Security Administration has provided data that helps them to quickly identify irregular practices and costs.

The identification of an institution which bills for what is indicated to be an unusual amount of physical therapy may reveal that services are being provided, and paid for, without regard to their medical necessity, and even their potential harm to elderly patients.

An abnormally large number of bills for physician visits to patients in extended care facilities may uncover a practice of "gang" visits. The physician may be submitting bills for visits to individual patients, but in fact reports so many visits for a given day that he could not have done more than stopped by the bed.

The Social Security Administration has also developed information that will enable the Medicare contractors to be alerted when a physician is receiving payments for more services than he would likely be able to perform under normal practice. If computer data and investigation show this to be a problem, these organizations enlist the help of medical societies to take corrective action.

Ole Miss Develops Insect Sting Drug

Foresters, campers, soldiers—and even backyard gardeners—will share the lifesaving benefits of an emergency drug being developed at the University of Mississippi.

For those who suffer severe allergic reaction to the sting of bees, wasps, hornets, yellow jackets and other insects, the sublingual tablet being developed at the Ole Miss School of Pharmacy might prevent shock or death in cases where there is no time to get an injection or to reach a medical facility.

Dr. Charles W. Hartman, dean of the pharmacy



A hornet's nest may hold less fear for those who suffer from severe allergic reaction to stings, due to research on an emergency drug underway at the University of Mississippi School of Pharmacy. "Juggling molecules" in an effort to perfect a sublingual tablet for use by allergy victims are (from left) Dr. Charles W. Hartman, dean of the pharmacy school, and Dr. Julian H. Fincher, associate professor of pharmacy.

school, and Dr. Julian H. Fincher, associate professor of pharmacy, are conducting the research.

"Speed of absorption is especially important in treating severe allergic reaction," Dean Hartman explained. "Research on the emergency tablet was begun in response to an initial request for an emergency tablet by members of the forestry department at the University of Georgia, where some forestry school researchers had developed severe allergies to stings."

Since there were no such products available, Dr. Hartman—who was at the University of Georgia when the request was made—retained his interest in the research when he came to Ole Miss.

There are several problems to be solved. "Not all drugs can be absorbed under the tongue," Dr. Hartman said. "Some drugs are 'bound' by saliva. This prevents their being absorbed."

This particular problem is solved either by "juggling the molecule," as Dean Hartman says, or "changing the physical form of the drug, or altering membranes of the mouth," according to Dr. Fincher, who is conducting the basic research.

"A small dose, if properly designed, allows absorption within 30 seconds," Dr. Fincher explained. "Sublingual medication is especially effective because of the high amount of blood circulation in the head," he added.

Both researchers agree that this type of investigation has been overlooked, and has tremendous potential. "Nitroglycerine is the most common sublingual medication, and is used for people who are subject to heart attacks," Dr. Hartman said. "This drug was developed earlier than an allergy tablet because there are many more people subject to heart attacks than to severe bee-sting allergy."

"But the development of such a tablet would be extremely valuable in many situations. The emergency drug would be particularly applicable to the military, where you have isolated men who are away from medical units," Dr. Hartman said.

A student participated in one phase of the research. Dr. Robert E. Davis, who received the Ph.D. degree in pharmacy in 1968 and is now a research scientist with Mead Johnson Laboratories, wrote his dissertation on the interactions of drugs in whole human saliva and simulated saliva.

Four MD's Indicted for Medicare Fraud

Four physicians and one non-physician have been indicted in Tampa, Fla., by a federal grand jury for alleged Medicare fraud estimated at more than \$200,000.

Those charged with "willfully and knowingly conspiring to defraud" the Medicare program by making false claims and statements are: Dr. Harry M. Katz, psychiatrist Dr. Pasquale Louis Gallizzi, Dr. Alex F. Amadio, Dr. Robert A. Brewer, and Miss Madge Mathis.

The Florida indictment follows close upon the conviction of a Florence, S. C., physician for filing "false information and fraudulent claims" for payments from Medicare.

Dr. Roy P. Cunningham was sentenced to eight years in federal prison by U. S. District Judge Charles E. Simmons on Dec. 22. He was found guilty on eight counts of submitting false claims for payment of 432 house calls, for a total of \$6,480. In passing sentence Judge Simmons said: "It is sad to see a man of Dr. Cunningham's background blow his career to the winds."

Dr. Cunningham is presently being held for observation for 90 days by the Federal Bureau of Prisons. After his examination he will be returned to Judge Simmons' court for final sentencing.

The conviction and sentencing of Dr. Cunningham was the second in the nation for fraud under the Medicare program. Some 2,500 cases have been investigated by the Social Security Administration during Medicare's 3½-year history.

Social Security Commissioner Robert M. Ball said that, "We are trying in every way to assure tight administration of the Medicare program. Built-in safeguards provide early detection of attempts at abuse and fraud," he said. "Medicare," the Commissioner noted, "pays about 30 million doctors' bills and 12 million bills from institutional providers of services each year. It is clear from our investigations," he added, "that the number of attempts at fraud or abuse is relatively very small."

About half of the cases investigated by the Social Security Administration, he said, resulted from clerical errors, misunderstandings or honest mistakes by physicians and health services.

To date, the Social Security Administration has referred the cases of 13 individuals and organizations to the Justice Department with the recommendation for criminal prosecution for fraud. Another five cases have been referred

with recommendations that civil proceedings be started for the return of illegally collected funds.

Social security investigators are presently preparing 35 other possible fraud cases for referral to the Justice Department.

The most common types of alleged violations reported include physicians and providers billing for services not rendered, excessive charges, alteration of bills, duplicate billing, misrepresentation of types of services or dates of services, unreported discounts (kickbacks) and employee embezzlement.

Dr. Wiygul Is Named Section Officer

Dr. Frank M. Wiygul, Jr., of Jackson has been appointed secretary of the Section on Preventive Medicine of the association's Scientific Assembly. The appointment was made and announced by Dr. James L. Royals of Jackson, president of the state medical association.

Dr. Wiygul succeeds Dr. Frank K. Tatum of Tupelo who was elected secretary of the section in 1969. Dr. Tatum resigned the post following his recent retirement for reasons of health.

Dr. Royals said that Dr. Wiygul will serve until 1972. As a section secretary, he is also a member of the House of Delegates. Chairman of the section is Dr. Frank J. Morgan, Jr., of Jackson who is Assistant State Health Officer.

Drs. Webb and Abraham Are ACOG Fellows

Dr. Henry H. Webb of Jackson and Dr. W. H. Abraham, Jr. of Meridian will be installed as Fellows of the American College of Obstetricians and Gynecologists at its annual meeting, April 12-18, in New York City.

The College, founded to promote the health and medical care of women, accepts physicians specializing completely in obstetrics and gynecology, who have successfully completed a clinical examination, and who have been judged by their colleagues as competent and ethical physicians.

A Fellow must be a graduate of an approved medical school and for at least five years prior to applying for membership in the College he must have limited his practice to obstetrics and gynecology.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 21-25, 1970, Chicago, Clinical Convention, Nov. 29-Dec. 2, 1970, Boston. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Southeastern Surgical Congress, 38th Annual Assembly, April 20-23, 1970, Atlanta. A. H. Letton, Secretary-Director, 340 Boulevard, N.E., Atlanta, Ga. 30312.

Louisiana-Mississippi Ophthalmological and Otolaryngological Society, Annual Meeting, April 3-4, 1970, Biloxi. Arthur V. Hays, Secretary, 3017 13th Street, Gulfport, Miss. 39501.

STATE AND LOCAL

Mississippi State Medical Association, 102nd Annual Session, May 11-14, 1970, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Robert P. Henderson, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday, April and First Wednesday November, 2:00 p.m., Clarksdale. Walter T. Taylor, P.O. Box 1237, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. C. Hal Cleveland, P.O. Box 1018, Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, April and October. Cherie Friedman, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. James E. Booth, Eupora, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. M. Howell, 139 Kirkwood St., Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, June, September, and December. Donald E. Dore, Singing River Hospital, Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. W. B. White, Medical Arts Bldg., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.

Early Filing Speeds Up Refunds

The number of federal individual income tax returns filed so far by Mississippi taxpayers is considerably less than those received for a comparable period last year, J. G. Martin, Jr., Mississippi District Director of Internal Revenue, announced recently.

Although the deadline for filing is April 15, both the taxpayer and the government would benefit if refund returns are filed early.

Mr. Martin pointed out that the Southeast Service Center is especially geared for high volume processing of refund returns early in the filing season.

Before filing, taxpayers should double check their Forms 1040 to be sure that all W-2's are attached, correct social security numbers and addresses are shown, and related schedules are attached. In the case of joint returns, both spouses' signatures are required.

Early federal income tax returns indicate that many taxpayers are making errors in claiming adjustments to their income which may delay their refunds.

The term "adjustments," as used on the tax

form, refers only to sick pay, moving expenses, employee business expenses, and payments to self-employment retirement plans. The total of these items is entered on Line 15B of the Form 1040.

Some taxpayers are incorrectly reporting on Line 15b, the total of their itemized deductions, such as, interest expense, state and local taxes, contributions, medical, or miscellaneous expenses. These deductions should be computed and entered on the appropriate schedules as provided in the instructions.

Taxpayers are also making mistakes by including as adjustments the exemption allowances for themselves, husbands or wives, children, or other dependents. For taxpayers who use the tax table to compute their tax, the exemption allowance is already figured into the table. Taxpayers who use the tax rate schedules should make their computations on Schedule T, which is included in the regular tax packet.

To avoid errors in claiming adjustments, it is suggested that taxpayers read the instructions carefully and make sure they have attached the proper supporting documents.

If these precautions are taken, refund checks should be delivered within five to six weeks from date of filing.

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EEG Society Plans 1970 Meeting

The American EEG Society announces that the 1970 Meeting will be held in Washington, D. C. at the Shoreham Hotel. The Scientific Session is to be held on the 17, 18 and 19 of September, 1970.

Members, as well as nonmembers, are invited to submit abstracts for presentation at the meeting by June 1, 1970. The abstracts should be submitted to: Dr. Reginald Bickford, Department of Neurosciences, University of California, La Jolla, Calif. 92037.

Answers to Cancer Quiz

1. D: The male-female ratio is 8:1 except for lesions of the posterior cricoid region which are more predominant in women.
2. B: Approximately 96% of laryngeal tumors are squamous cell carcinomas. Adenocarcinoma arising from mucous glands is seen occasionally. Sarcomas are rare.
3. False: The true vocal cords are practically devoid of lymphatic channels and therefore lesions arising here tend to metastasize late. The areas above and below the true cords have a more extensive lymphatic supply and therefore metastasize early. The area above the true cords (supra-glottic region) is drained by vessels which pass upward, penetrate the thyro-hyoid membrane, and end in the upper deep cervical nodes in the region of the carotid bifurcation. The area below the true cords (subglottic region) is drained by vessels which pass downward to end in the prelaryngeal, pretracheal, and lower deep cervical nodes.
4. True: Pain is frequently referred to the ear through Arnold's branch of the vagus nerve. This is more frequent with lesions of the pyriform sinus, than with lesions of the cords.
5. False: All tumors should be clinically staged according to location, extent and metastasis. Treatment is then planned on the basis of such staging. Systems of clinical staging have been in use for a number of years and we are now able to utilize the results of these

studies in establishing the best possible treatment and the prognosis of any given lesion.

6. False: In several large studies hoarseness was the most frequent presenting complaint. It is early and usually the only symptom with lesions of the intrinsic larynx (structures within the larynx). Lesions of the epiglottis and pyriform sinus develop hoarseness rather late, if at all. Other symptoms are: vague discomfort in the throat, ear pain, increased secretions, irritable cough, dyspnea, dysphagia, and a foul smelling breath.
7. False: Node biopsy is contraindicated. In 90-95% of cases presenting with neck nodes the diagnosis can be made without formal biopsy of the neck mass. In most cases endoscopy (laryngoscopy, esophagoscopy, bronchoscopy, and nasopharyngoscopy) will reveal a primary lesion which can be biopsied directly. Unnecessary biopsies of neck masses prior to definitive treatment lowers the five years survival rate in such cases.
8. B: Radiation therapy is generally the treatment of choice in most small (Stage I) lesions of the cords. Surgery achieves the same five years cure rate, however X-ray leaves the patient with a better voice.
9. True: In recent years several investigators have reported a better five year survival rate in larger lesions of the larynx by employing low dosage preoperative radiation therapy followed immediately by surgical resection of the tumor and the related lymphatic channels.
10. True: When properly carried out such studies are of great value in determining the extent of functional impairment and the size of lesions.

West Miss. Society Elects Officers

Dr. J. Robert Shell of Vicksburg has been elected president of the West Mississippi Medical Society.

Other newly elected officers include Dr. Chester W. Masterson of Vicksburg, president-elect; and Dr. M. E. Hinman of Vicksburg, secretary-treasurer.

The West Mississippi Medical Society is composed of physicians from Issaquena, Sharkey and Warren counties.

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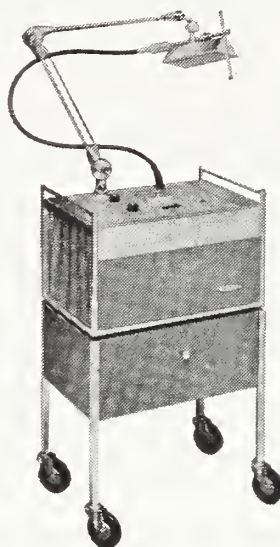
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Index to Advertisers

Arch Laboratories	147	Merck, Sharp and Dohme	14, 15, 16
Breon Laboratories	12	William S. Merrell Company	141
Bristol Labs	17	Mississippi Hospital and Medical Service	7
Burroughs-Wellcome	136B	National Drug Company	second cover, 132A, 132B
Campbell Soup Company	116A	Parke Davis and Co.	116D, 128A
Highland Hospital	145	Wm. P. Poythress	128D
Hillcrest Hospital	6	A. H. Robins Co., Inc.	10A, 10B, 138
Hynson, Westcott and Dunning, Inc.	3	Roche Laboratories	8, 142, fourth cover
Kay Surgical, Inc.	147	G. D. Searle Co.	116B, 116C
Lederle Laboratories	4, 10, 136A	Stuart Company	11
Eli Lilly and Company	front cover, 18	Wyeth Laboratories	128B, 128C
		Thomas Yates and Company	third cover

IN CONCLUSION

MSMA Medical Care Plans Department has initiated continuing studies on why CHAMPUS claims must be returned or rejected. One out of nine is returned and major reasons are poor description of services rendered, faulty patient identification data from card, and need to make separate claims. One out of 10 CHAMPUS claims is ineligible because of unsatisfied outpatient deductibles. Quality of claims excellent, and Review Committee now sees only 2 per cent of total.

AMA Committee on Rating of Mental and Physical Impairment has just published 12th guide in its series, this time "Guides to the Evaluation of Permanent Impairment - the Skin." Previous guides deal with extremities and back, visual system, cardiovascular system, ENT and related structures, central nervous system, digestive tract, respiratory system, peripheral spinal nerves, endocrine system, mental illness, and reproductive and urinary systems. Single copies are free.

President Nixon named rising costs, manpower shortages, and insufficient care for poor most pressing and urgent health care problems. Budget message sent up to Capitol Hill asks more money than ever before, expanded Hill-Burton program, tighter controls on Medicaid, and new programs for the poor. Social Security Administration will get 1,600 more employees and medical education, an additional \$25 million. Regional Medical Programs got cut by \$3.5 million.

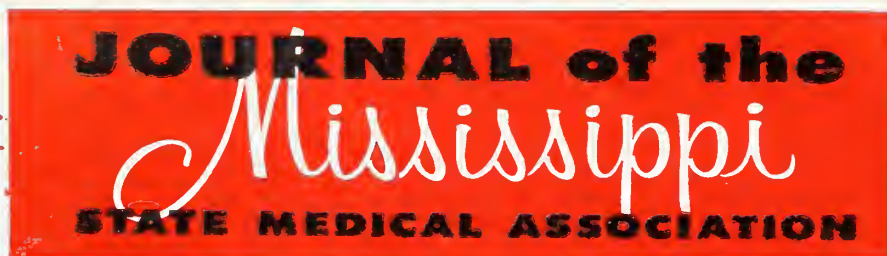
American College of Radiology will pioneer a summer preceptorship program for medical students. First year students will get chance to work in diagnostic radiology, while second year level is slated for training in therapeutic radiology. College foundation will pay students a stipend of \$800 during eight-week training periods which will be tax-deductible. Idea in program is to recruit residents.

Television is promoting adoptions in California, according to American Academy of Pediatrics. Los Angeles County Department of Adoption goes on air weekly to show off "special needs" youngsters such as the handicapped. Program has paid off with 202 adoptions out of 282 children appearing on TV. Similar efforts will soon be made in New York, Washington, Kansas City, and San Francisco.

Volume XI

Number 4

April 1970



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CONTENTS

ORIGINAL PAPER

- Management of Posterior
Segment Intraocular
Foreign Bodies **149** MORTON F. GOLDBERG,
M.D.

SPECIAL ARTICLE

- Radiologic Seminar
XCIV Intravenous
Cholangiography **160** JAMES B. BARLOW, M.D.

ANNUAL SESSION

- Complete Program **163** Four Days in May
Handbook of the House
of Delegates **187** Advance Reports

EDITORIALS

- Professional
Corporations:
They're Here! **191** Our New Law
Complete Care of the
Whole Man **193** Medicine and Religion
Malthus and
Meat Analogs **193** Ersatz, But Good!

THIS MONTH

- The President Speaking **190** Continuum of Crisis
Medical Organization **198** Pharmacy School Museum

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MSBH Has Social Services Supervisor

Dr. H. B. Cottrell, executive officer, Mississippi State Board of Health, has announced the appointment of a supervisor of social services for the State Board of Health.

He said the newly-created post will be filled by Miss Geraldine Parish, formerly with the Family and Children's Services of the Mississippi Department of Public Welfare.

"The development of a Social Service Unit in the State Board of Health can be invaluable in the coordination and delivery of health services," said Dr. Cottrell.

"Social workers," he said, "can assist in the interpretation of services to patients and in interpreting the needs of the patients to the health workers.

"They can provide assistance in working with other agencies—public and private—in planning for patients. They may participate in training programs for nurses, mental health programs, chronic-illness programs, family planning, special clinics and related services.

"The social worker can assist the county health departments in organizing community

groups for the promotion of a specific health service.

"Adding the dimension of social services will, I'm sure, result in more effective delivery of comprehensive health services to Mississippians throughout the state."

Miss Parish has already participated in neurology clinics in Meridian, Hattiesburg, Greenville, Indianola and Greenwood, working under the medical direction of Dr. Frank M. Wiygul, Jr., director of the Division of General Health Services, State Board of Health.

She is currently involved in assisting in planning a pilot project in Warren County for medical screening of all persons under 21 who qualify for Medicaid. After the pilot project gets underway in March, the service will be extended to all under 21 in the state who are eligible for Medicaid.

Miss Parish is a graduate of the Tulane School of Social Work, from which she holds a Master of Social Work degree. While with the Mississippi Department of Public Welfare, she served as coordinator of children's services in the Family and Children's Services Division.

Miss Parish is active in the Magnolia Chapter of the National Association of Social Workers and is a member of the Academy of Certified Social Workers. She is president-elect of the Mississippi Conference on Social Welfare.

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NEWSLETTER

April 1970

Dear Doctor:

v. John Bell Williams signed the association's professional corporation bill, HB 48, into law on March 17. Measure permits physicians to set up tax-qualified corporations under state and federal statutes, enjoying benefits of retirement plans, group life and health insurance, sick leave, and tax-free death benefits. See lead editorial in this issue for report.

Association-sponsored enactment provides for solo M.D.'s incorporation. Other benefits in excellent law impart rights under Mississippi Business Corporation Act to professional corporations. But caution is urged in setting up corporations which must comply with federal law.

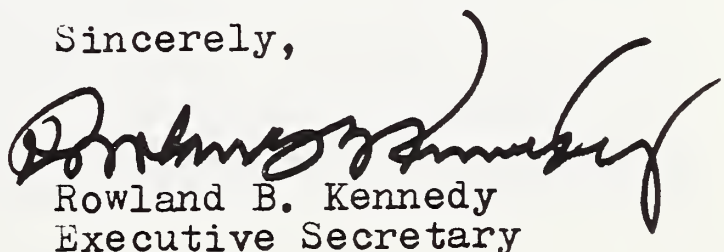
n. Gaylord Nelson (D., Wis.) was charged by head of birth control organization as "causing 100,000 unwanted pregnancies." Nelson subcommittee conducted loaded hearing on The Pill, and FDA obediently took up cudgel and ordered warnings to patients in oral contraceptive package inserts. Precedent-shattering move constitutes invasion by government in physician-patient relation.

W Undersecretary John Veneman advocates amendments to Medicare and Medicaid imposing fee schedules on physicians and hospitals. Veneman would pay 75th percentile of 1969 rate. Unexpected opposition came from organized labor when California union chief Sam Moore said "we don't want wage controls on doctors any more than we would want wage controls on union members."

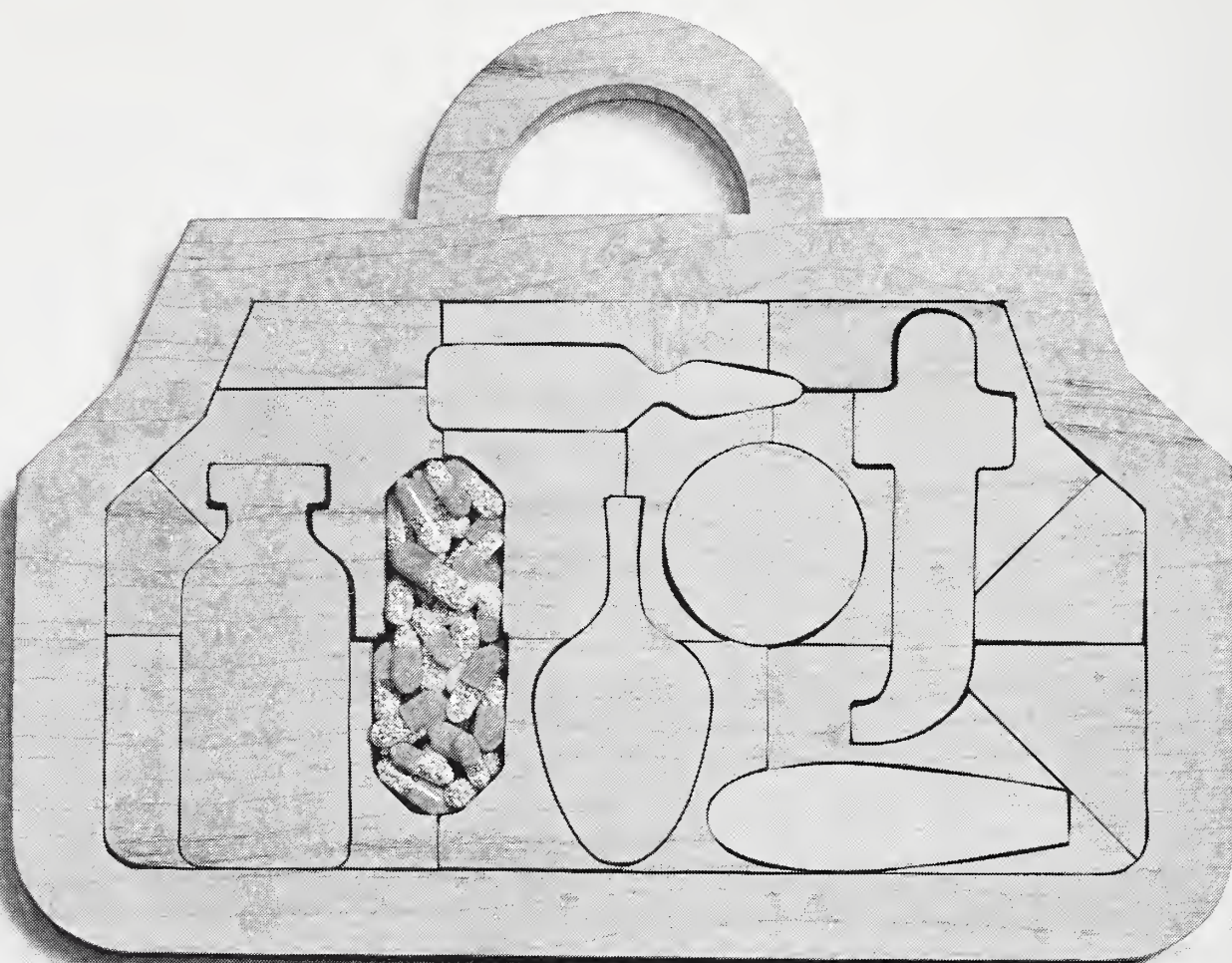
o more state medical associations are taking over Medicaid fiscal administration from health insurance and prepayment plans. Medical Association of Georgia, an original CHAMPUS administrator, is in business, while New Mexico Medical Society begins in summer after restaffing and acquiring computer. Arrangements were made with association officers with Assistant HEW Secretary Egeberg.

ough new regulations have been adopted on reporting payments to providers of services under Medicaid. Now required are annual reports to IRS on identity of providers receiving more than \$600. Regulations also call for sample verification with recipients that services paid were actually received.

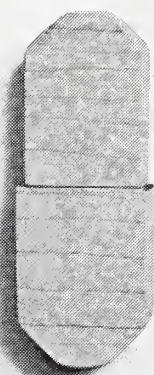
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Wrong Tables May Cause Overpayment

So far this year 756 taxpayers in Mississippi have used the wrong tax table or rate schedule in computing their 1969 Federal income tax.

Not only have refunds been delayed but many taxpayers have overpaid their income tax as a result, reports J. G. Martin, Jr., district director of Internal Revenue for Mississippi.

The problem occurs when a married taxpayer filing a joint return uses the tax table for either married couples filing separately or for single persons. Frequently, single taxpayers use the tables for married taxpayers by mistake.

There are separate tax tables for single persons, unmarried heads of household, married couples filing jointly and married couples filing separate returns. Mr. Martin urged Mississippi taxpayers to use the right one to avoid mistakes.

Computation from the wrong tax table results

in the wrong tax due. Some taxpayers, as a result of the error, receive a smaller, or larger refund and others receive a bill for additional tax.

Another major reason for refund delay is the failure of taxpayers to include their correct Social Security number.

So far this year, 196 refunds have been delayed in Mississippi because of incorrect or missing Social Security numbers, he reported.

Other refunds are being held up for a variety of other errors or failures to follow instructions that are included with the returns.

So far errors in arithmetic are causing delay in sending refunds to 415 taxpayers in Mississippi.

Through last week, there were 1,061 tax returns filed without signatures, including those of husband or wife on joint returns. These have to be sent back to the taxpayers before refunds can be processed.

Mr. Martin said 20,381 taxpayers in Mississippi have received refunds totaling \$3,699,120.45 since Jan.

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childhood). *Precautions:* Mycotic or bacterial superinfection may occur. Infants may develop increased intracranial pressure with bulging fontanelles. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 4 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis and allergic reactions may occur. *Usual Adult Dose:* 1 Gm./day in 4 divided doses. Continue therapy for 10 days in Group A Beta-hemolytic streptococcal infections. Administer one hour before or 2 hours after meals. *Supplied:* Capsules—250 mg. in bottles of 16 and 100. bidCAPS—500 mg. in bottles of 16 and 50.

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ATELINE

ag Spots End Washington - TV networks get a last bonanza
Cash Blast on cigarette advertising with change of one
 day on permanent ban by the House and Senate.
law was delayed one day, becoming effective Jan. 2, 1971,
fitting all-out swan song by tobacco manufacturers in bowl
telecasts New Years Day. Compromise law can't touch printed
but will require tougher package warning on fags.

s are White New York - A Health Insurance Institute study
ar Killers concludes that office workers are surrounded
 by potential assassins, chairs, stairs, file
nets, and elevators. Five-year survey disclosed that falls in
ces are leading cause of injury and disability for employees
his order: Falls in corridors, chairs, stairs, escalators,
elevators. Study also showed that employees themselves are
onsible for mishaps, rather than faulty equipment.

Administrators Washington - Administrators of nursing homes
Be Licensed and extended care facilities must be licensed
 by states on July 1, 1970, if facility is to
lify for Medicaid payments. Requirement leaves licensure to
ces as well as minimum qualifications for licensing. Federal
ulation has one-year grandfather clause as well as two-year
visional licensure during which applicant may qualify.

ments Hit \$71 Jackson - Health insurance and prepayment paid
lion in State Mississippians \$71 million in benefits during
 1969, reports the Health Insurance Institute.
mercial companies paid \$43.4 million, while Blue plan and other
governmental sources paid just over \$27 million. HII says that
million Mississippians under 65 had coverage last year for medi-
care. Other findings showed average daily hospital census of
00 patients and 300,000 admissions during '69 for Mississippi.

l Tax Proposed Atlanta - Former FDA chief James Goddard has
Addiction Care proposed a penny-a-pill tax on tranquilizers
 and stimulants to pay for care of drug abuse
ents and to finance nation-wide education program. Dr. Goddard
s that unique tax would raise \$160 million annually. Observers
ed that extension of tax to every pill listed as subject to abuse
d produce upwards of \$500 million per year.

Individual's Health Burden Eased

In a time when annual medical care expenditures have soared to \$60.3 billion, the government's health care programs are significantly easing the individual's financial burden, according to a chart booklet on medical costs published by the Social Security Administration.

The booklet, "The Size and Shape of the Medical Care Dollar," was prepared by the Administration's Office of Research and Statistics and covers the period from 1950 through the end of fiscal year 1969.

As detailed in the booklet's charts, medical care expenditures during that 19-year period in the United States have increased almost five times over, markedly climbing from the \$12.1 billion that was spent on health care in 1950. Today's medical care dollars now account for a 6.7 per cent share of the Gross National Product; in 1950, medical expenses made up 4.6 per cent of the GNP.

At the same time, however, it is noted that the

percentage of medical costs borne by the individual has actually decreased in the last several years—and especially since 1966—after enactment of Medicare and Medicaid.

Throughout the 36-page booklet, the Social Security Administration takes note of "rising health costs," and at one point lists 10 steps that the Federal Government is taking to "insure that the nation gets more for its health dollar."

Among those steps are included the use of stricter guidelines for hospitals and nursing homes which are participating in the Medicare program, and the promotion of less expensive alternatives to inpatient medical care for individuals who would benefit from more economical care.

The chart booklet notes that the largest growth in medical spending from 1950 was due to increases in prices of everything from hospital services to doctors' fees.

As noted in the text accompanying one of the booklet's charts, "A dollar of health care spent today does not go nearly as far in paying for a day of care or a unit of service as it would have several years ago." In fact, from 1965 to 1968, medical care prices jumped almost twice as fast as prices for all consumer items.

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References: 1. Olsen, J. R.: *Journal-Lancet* 85:287 (July) 1965. 2. Lechevalier, H.: *Antibiotics Annual 1959-1960*, New York, Antibiotica, Inc., 1960, pp. 614-618. 3. Giorlando, S. W., Torres, J. F., and Muscillo, G.: *Am. J. Obst. & Gynec.* 90:370 (Oct. 1) 1964. 4. Friedel, H. J.: *Maryland M. J.* 15:36 (Feb.) 1966.

Few Tax Changes Affect 1969 Returns

Receipts of individual tax returns are down nine per cent from last year, announced J. G. Martin, Jr., District Director of Internal Revenue Service. Only 8.1 million federal income tax returns had been filed by mid-February.

Many taxpayers appear to be needlessly delaying their refunds by waiting for additional instructions on the new tax law. Most of the changes made by the Tax Reform Act of 1969 relate to 1970 and later years, and affect only a small percentage of individual income tax returns for 1969, Martin said.

Changes affecting returns for 1969 that must be filed by April 15 involve living expenses paid by insurance as a result of home damage or destruction; sales of collections of letters, memos, etc.; gains from certain installment sales; depreciation and amortization; and investment credit.

Under the new law a taxpayer whose home is damaged by storm, fire, or other casualty does not have to pay tax on the insurance proceeds he receives for temporary living expenses. The amount not subject to tax is limited to actual expenses that are over and above normal living expenses.

Gains from sales made by a taxpayer after July 25, 1969, of collections of letters and documents that were created by or for him will be taxed as ordinary income rather than capital gains.

Sales of real property and casual sales of personal property made after May 27, 1969, for a price of more than \$1,000 are subject to new rules in cases when the seller reports his gain in installments extending over two or more years.

The investment credit in most cases ended April 18, 1969; however, the investment credit is available for property bought, built or rebuilt under a binding contract entered into before April 19, 1969, or in certain other transitional situations.

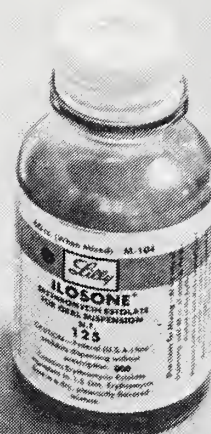
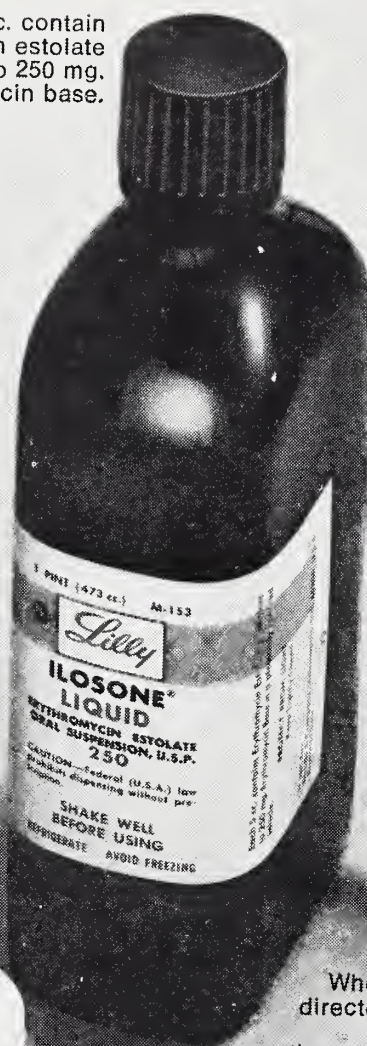
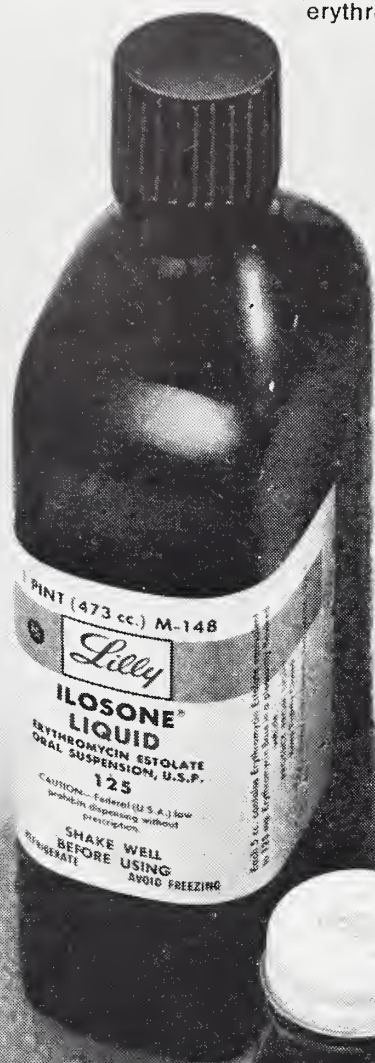
The use of accelerated depreciation of real property acquired after July 24, 1969, has been limited, but a 60-month write-off of air or water pollution control facilities has been added for 1969 returns.

Taxpayers concerned with these matters for their 1969 returns may find it helpful to obtain a new publication "Highlights of 1969 Changes in the Tax Law"—IRS Publication 553—available free from IRS district offices.



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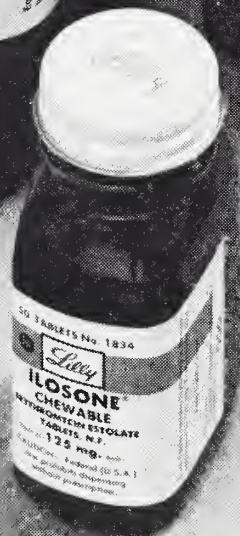


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ORIGINAL PAPERS

Management of Posterior Segment Intraocular Foreign Bodies

MORTON F. GOLDBERG, M.D.

Arlington, Virginia

MANAGEMENT OF POSTERIOR segment intraocular foreign bodies has always been complex. Although recent technical advances have facilitated the extraction of such objects, the prognosis for retention of an eye and for restoration of normal visual acuity remains guarded even in the most favorable circumstances. Optimal clinical management depends upon the following factors: (1) accurate localization of the foreign body; (2) knowledge of its composition; (3) awareness of the extent of the ocular trauma; (4) the proper decision on whether to remove the foreign body or to leave it *in situ*; and (5) once undertaken, technical excellence in the actual removal of the foreign body.¹

The possibility of a retained intraocular foreign body should be considered in every perforating ocular injury.¹ Retained foreign bodies can lodge anywhere on the surface of the globe or within its wall, or can be buried within any of its various intraocular tissues. Common sites for re-

tained intraocular foreign bodies are as follows: anterior chamber, 15 per cent; lens, 8 per cent; posterior segment, 70 per cent; and orbit (double

Recent technical advances have facilitated the extraction of posterior segment intraocular foreign bodies. However, the prognosis for retention of the eye and for restoration of normal visual acuity remains guarded even in the most favorable circumstances. The author discusses the factors involved in optimal clinical management: localization of the foreign body, knowledge of its composition, awareness of the extent of the ocular trauma, the proper decision on whether or not to remove the foreign body and the technique required in removal.

perforation), 7 per cent.² The detection of a single foreign body in any one of these locations should not provide a sense of false security, since multiple intraocular foreign bodies are not uncommon. This is particularly true in modern in-

Consultant in Ophthalmology, Neurological and Sensory Disease Control Program, U. S. Public Health Service. Presented in part at the 101st Annual Session of the Mississippi State Medical Association, Biloxi, May 15, 1969.

dustrial and military accidents in which the eye may be subject to a barrage of missiles from explosions and other incidents.

Although there are many techniques for indirect demonstration of an intraocular location, the most important single maneuver in the determination of appropriate therapy for any patient is direct visualization of the foreign body. This is particularly important, because double perforation of the globe may have occurred. In such cases, it is sometimes difficult to know, in the presence of opaque ocular media, whether or not the foreign body remains inside the eye. If one has direct visualization of the foreign body, however, there is no doubt as to its location, and subsequent decisions regarding possible removal can be made more easily.

IMPORTANT MANEUVERS

Since a penetrating injury complicated by an intraocular foreign body results in post-traumatic inflammatory processes, many of which tend to cloud the ocular media, certain immediate maneuvers should be performed upon examining the patient. Immediate and maximum pupillary dilatation is probably the most important. Because of the complicating factors of post-traumatic miosis, iridocyclitis, cataract, vitreous hemorrhage or inflammation, or hypotony, the first examiner is sometimes the only person who has an opportunity to examine through clear ocular media. Any delay in visualization of the posterior segment can result in failure to detect the presence of an intraocular foreign body, a double perforation, or associated intraocular injuries such as ricochet wounds in the retina or trauma to the macula or optic nerve.

Severe iritis can occur within minutes or hours following trauma, and a profuse collection of inflammatory debris can obscure a small pupil and contribute to early posterior synechiae in a state of pupillary miosis. Traumatic cataract formation can similarly occur within minutes or hours, and an initially transparent lens, which allows careful inspection of the posterior segment, can progress to a totally opaque structure, which precludes any accurate determination of the state of the posterior segment of the eye. In addition, an early vitreous hemorrhage may be confined to one area of the vitreous chamber, but the effects of time, gravity, and motion of the globe may all contribute towards dissemination of the blood within the vitreous chamber, with subsequent and consequent loss of transparency and visibility.

With regard to immediate visualization of the posterior segment of the eye, binocular indirect ophthalmoscopy remains the best and most immediately available technique. The power of the illuminating bulb, the ability to achieve stereopsis, and the capacity to examine most, if not all, of the posterior segment make the binocular indirect ophthalmoscope indispensable for an accurate and complete diagnosis. Although the monocular, direct ophthalmoscope is useful in certain circumstances, it does not approach the usefulness and versatility of the binocular indirect ophthalmoscope. This is particularly true when the ocular media have already become partially opaque. Occasionally, the slit lamp, with or without use of a three-mirror contact lens, is useful in locating foreign bodies in the anterior or peripheral vitreous chamber.

Indirect demonstration of intraocular foreign bodies is rarely as convincing as direct visualization but occasionally is highly useful because of the presence of totally opaque ocular media. There are three general types of indirect demonstration of intraocular foreign bodies: (1) radiologic procedures; (2) foreign body locators; and (3) ultrasonic probes.

ORBITAL RADIOGRAPHS

Routine, plain, orbital radiographs can occasionally be very useful, even in the presence of small foreign bodies, if certain precautions are observed in obtaining them. Whenever possible, new cassettes should be utilized, because older, extensively used cassettes frequently have a variety of small radiopaque markings from accumulated debris or mishandling, and the final x-ray often shows artifacts simulating intraocular or intraorbital foreign bodies. If new cassettes are unavailable and a foreign body appears to be present, the same view should be repeated with a different cassette. This will have a different set of artifacts, but should not reproduce any suspicious radiopacity seen on the initial film. Two radiologic views are useful in the detection of intraocular foreign bodies: An anteroposterior view and Belot's modified lateral view, which imposes only the shadow of the thinned lateral wall of the bony orbit upon the area of the globe.²

The A-P view and modified lateral view should be repeated with the eyes in a new position of gaze, either maximum supraduction or maximum infraduction. To prevent artifactitious movement of the foreign body, the patient's head can be immobilized with a bite-board. If there is no shift in position of the foreign body on maximum change in gaze, it is unlikely that it lies

within the globe. On the other hand, if the foreign body does, in fact, shift, it can be either intraocular in location or can be attached to the outside wall of the eye or to one of the extraocular muscles.

In all such x-ray studies, fixation and immobility of the head are of paramount importance, since motion blurs the image of a foreign body. If the foreign body is small, its image may be obscured against the background of radiopaque bony tissues. Similarly, a short exposure time (preferably less than 0.5 seconds), a short film distance designed to minimize distortion (about 24 inches), fast film, and soft x-rays (so that the cornea-air interface can be seen on lateral views) will all maximize the ability to detect foreign bodies whose density would otherwise make radiologic demonstration difficult. If there is any doubt of the ability of x-rays to demonstrate an intraocular or intraorbital foreign body, one can tape residual debris, presumably similar in nature to the offending object itself, to the x-ray cassette prior to making the exposure.

SCREENING TESTS

A quick screening test of considerable value utilizes a 25-cent coin.¹ When the 25-cent coin is placed in the center of an anteroposterior x-ray of the orbit, it approximates the average diameter of the globe (24 mm.). Consequently, any radiopaque foreign body lying outside the circumference of the 25-cent piece is, of necessity, located outside the average-sized eye. If the shadow of the foreign body is covered by the coin, it may be in an intraocular location, but other confirmatory tests are required.

The bonefree technique of orbital x-rays is invaluable in demonstrating small foreign bodies or foreign bodies whose density approaches that of orbital bone; for example, aluminum. In taking bonefree views, dental x-ray film is utilized in both lateral and anteroposterior directions. In the lateral approach, the x-ray film is pressed into the area of the medial canthus, and the x-ray tube is directed from the lateral position.¹ The eye, of course, should be anesthetized topically, and the manipulation should be performed by an individual who is accustomed to handling ocular tissues. Pressure should not be applied on an eye with an open perforation.

For the anteroposterior projections, the x-ray film can be placed in the superior and inferior conjunctival cul-de-sacs or in the upper lid recess, and the x-ray is projected through the globe onto the film. Glass foreign bodies are ordinarily very difficult to demonstrate radiologically unless they

contain barium or lead. With the bonefree technique, they can be visible, regardless of their metal content.

RETROBULBAR INJECTION

Occasionally a foreign body will be located near the posterior pole of the eye, and there is doubt as to whether or not it is intra- or extraocular. In such circumstances a retrobulbar injection of an aqueous solution of radiopaque material (such as Hypaque) can be used to outline the posterior contour of the scleral shell. A lateral view can then demonstrate whether or not the radiopaque material lies posterior to the foreign body, in which case it is presumed that the foreign body is in an intraocular location.

More precise radiopaque localization techniques include the following: Sweet's technique, Comberg's technique, Spindell's technique, and the use of radiopaque scleral markers.¹⁻³ The first three of these techniques have in common the fallacy that all eyes have identical standard dimensions. It is usually assumed that the average eye is 24 mm. in diameter. However, the adult human eye varies from about 20 mm. to 26 mm. in diameter. This range of dimensions is increased in abnormal refractive states such as in high myopia or high hyperopia. In practice, therefore, the foregoing techniques are subject to significant error when they localize foreign bodies within a millimeter or so of the scleral shell. In cases of high myopia, for example, a foreign body may be localized just posterior to the globe (using an average diameter of 24 mm.) when, in fact, the foreign body may actually be within the globe. The reverse situation may be true of high hyperopia, wherein the localization procedures ostensibly demonstrate an intraocular location when, in fact, the foreign body may be lying a few millimeters posterior to the globe. Nonetheless, the localization techniques of Sweet, Comberg, and Spindell are useful in most clinical situations.

The Sweet technique remains the standard radiological localization procedure. It is based upon a triangulation principle and utilizes a small radiopaque device which is positioned at a known distance in front of the eye.² Unfortunately, the range of error is 2-4 mm., especially if the foreign body is in a posterior location. However, its advantages are that the apparatus used for the radiographic procedure does not touch the injured eye, and the radiologic image of the localizing device is not superimposed on the image of the foreign body. The major disadvantages include the assumption that the eye is 24 mm. in diameter; the error of 2-4 mm.; and the difficulty of

maintaining immobility of the patient's head and complete fixation of the eye. Finally, this procedure is difficult for the inexperienced radiologist.

The Comberg technique utilizes a contact lens with radiopaque markers and is more accurate than the Sweet technique, since the markers actually touch the eye, thereby reducing the error of radiologic magnification. This technique is also advantageous in that the radiodensity of the lead markers allows a qualitative interpretation of the nature of various foreign bodies. Disadvantages of the Comberg technique include the standard assumption of the 24 mm. eye; possible superimposition of the contact lens markers on the image of the foreign body; contact of the lens with an injured eye, possibly inducing infection or additional trauma; difficulty of applying a contact lens to a nervous or a young patient; and, finally, improper positioning of the lens due to the presence of chemosis or a deformed anterior segment.

SPINDELL TECHNIQUE

A more recently published technique by Spindell includes the use of orbital laminograms taken in conjunction with a specially designed radiopaque spectacle frame.³ Again, the assumption of a 24 mm. eye could contribute to an inaccurate localization.

Radiopaque scleral markers provide a very accurate means of localizing foreign bodies within the eye but require aseptic technique. Thus, this procedure is usually reserved for operating room usage. In performing these maneuvers, needles or other radiopaque markers are inserted into the sclera in various locations, and a series of bone-free x-rays or standard orbital views is taken. The markers are then moved until they are superimposed in both anteroposterior and lateral projections on the image of the foreign body. They thus provide accurate external localization of an intraocular object.

Foreign body locators, typified by the Berman apparatus, can be useful, particularly when foreign bodies are composed of certain materials or when they are found in certain locations. The Berman apparatus is especially responsive to iron-containing and carbon steel-containing foreign bodies, as well as to foreign bodies of pure nickel. It is not well suited for detection of alloy steels, coin nickel, brass, copper, lead, or aluminum. The reactivity of the locator is directly re-

lated to the size and to the magnetic or conductive properties of the foreign body. For example, the detecting range for an iron-containing object is about 10 times the diameter of the foreign body; e.g., a 1 mm. iron foreign body is detectable at a distance of about 10 mm.² For nonmagnetic metals, foreign bodies are detectable within one to two times their own diameter. Thus, for the sake of practicality, a non-magnetic foreign body has to be greater than about 3 mm. in diameter in order to be detected by the Berman locator.

DISADVANTAGES

Disadvantages of such apparatuses in locating intraocular foreign bodies include the fact that foreign bodies may shift their position at the time of surgery (after completion of the localization procedure). The locator is most valuable for detecting a foreign body which is embedded posteriorly in the wall of the eye, and a direct trans-scleral cutdown or extraction is contemplated. It is also useful in locating foreign bodies in Tenon's capsule, which otherwise resembles finding a needle in a haystack.

More recently, A-mode ultrasonic probes have been evaluated as foreign body locators.⁴ While foreign bodies can usually be detected in intraocular locations by these devices, it has recently been determined that the Sweet technique is more accurate, because, should a foreign body lie in a tissue interface such as the wall of the eye, it cannot be ultrasonically distinguished from that interface.⁴

SILENT FOREIGN BODIES

Despite the widespread use of the foregoing techniques, there are certain foreign bodies which remain silent and undetectable. Various clues provide suspicion that the eye harbors such objects. These clues include the following: focal bedewing; a biomicroscopically visible corneal or vitreous tract; angle trauma with peripheral anterior synechiae or angle recession; iridotomy or iridodialysis (sometimes best visualized by retroillumination); heterochromia; anisocoria or pupillary irregularity; sector zonulolysis; persistent hypopyon; persistent uveitis; or possibly a focally tender ciliary body (overlying the site of a foreign body).

One factor determines to a large extent the success or failure of an attempt at removal of an intraocular foreign body; namely, its magnetic properties. Iron, pure nickel, cobalt, and some manganese alloys are magnetic, and, consequently, can be extracted from the eye with minimal

trauma. Iron-containing foreign bodies are particularly dangerous because they commonly cause siderosis bulbi. In this disease, iron is deposited in intracellular locations throughout the eye, resulting ultimately (in about two months to two years) in retinal degeneration, cataract, discoloration of the uveal tissues, or absolute glaucoma. It is thus fortunate that iron-containing foreign bodies can usually be extracted atraumatically by a magnet.

COPPER BODIES

Copper-containing foreign bodies can produce an acute, sterile, chemical, purulent panophthalmitis if the foreign body is composed of a high concentration of copper (greater than about 85 per cent) or if the copper is present on the outside of the foreign body in high concentration, from which it can diffuse into the surrounding ocular tissues.² Such a disastrous complication usually occurs in the immediate post-traumatic period. On the other hand, a more chronic and less serious course of copper deposition on the membranes of the eye (Descemet's membrane, lens capsule, etc.) can occur, resulting in the condition known as chalcosis. Such an eventuality is not nearly as common nor as detrimental to the visual status of the eye as is that from an iron-containing foreign body. The Kayser-Fleischer ring and sunflower cataract, produced by deposition of copper in the cornea and in the lens capsule, mimic those seen in Wilson's hepatolenticular degeneration. They, themselves, are not responsible for visual disability, but ocular degeneration and blindness can definitely occur from chalcosis.

In order to determine the chemical nature of certain unknown intraocular foreign bodies, the surgeon can perform an anterior chamber paracentesis and chemically analyze the aqueous humor for such substances as copper, aluminum, magnesium, and lead. Similarly, he can indirectly determine the nature of certain retained objects by attaching a spectroscopic ocular to a slit lamp. More directly, if there is residual debris from the material causing the ocular penetration, the foreign material itself can be chemically analyzed.

OCULAR REACTIVITY

Knowledge of the ocular reactivity of these substances enables the surgeon to vary the aggressiveness with which he pursues the extraction of intraocular foreign bodies. In decreasing order of ocular reactivity the following substances can be listed: iron, copper, mercury, aluminum, nickel, zinc, lead, precious metals, glass, plastics, etc.²

Of these all are nonmagnetic except iron and pure nickel.

As in all perforating injuries, exquisite consideration for the potential development of sympathetic ophthalmia is an absolute requirement. Careful biomicroscopic evaluation of the non-penetrated eye should be part of the daily examination ritual, in order to determine if there are early signs of inflammation. Any consideration towards definitive therapy should involve the possibility of enucleating the injured eye within the first eight or ten days of the traumatic episode in an effort to forestall the development of sympathetic ophthalmia. If good visual acuity remains and the perforation can be surgically repaired without significant damage to the eye, the physician is justified in attempting to retain the injured eye. In making the decision on whether or not to enucleate the injured eye, the perforating effects of the trauma must be assessed in conjunction with the blunt contusive effects, the immediate chemical effects, and the immediate inflammatory effects. In addition, an informed judgment as to the probable consequences of subsequent chemical, inflammatory, and reparative processes must be included in the over-all judgment of the clinical situation.

SALVAGING THE EYE

At the time of initial surgical repair of the wound of entry, all efforts should be expanded in the attempt to salvage the eye. Seemingly hopeless situations, characterized by gaping wounds, avulsed tissue, prolapsed intraocular contents, and extensive hemorrhage can occasionally be converted into much more favorable circumstances by virtue of a meticulous surgical restoration. If accurate projection of light is lost during the first post-traumatic week or two, enucleation is probably then in the best interests of the patient. Occasionally, immediate enucleation is justified, as in the case of total disruption of the globe from a bullet's direct hit.

Since intraocular foreign bodies can cause ricochet wounds in the retina or can produce double perforations, complete retinal evaluation should be performed in salvageable cases, so that any retinal break or scleral wound of exit can be treated at the time of closure of the wound of entry or at the time of foreign body extraction.

The decision to attempt removal of the foreign body is determined by weighing the contusive, inflammatory, and chemical effects of the initial trauma and its probable later inflammatory, chemical, and fibrotic effects (together with the effects of subsequent surgical trauma) plus the

possible inability to remove the foreign body. In most cases, with or without surgical intervention, therapy with systemic and local antibiotics and corticosteroids is warranted. Early inflammatory changes are, as noted previously, sometimes the result of sterile chemical processes, especially from copper. If this appears to be the case (and such a likelihood can be corroborated by chemical analysis of material remaining from the accident, particularly if the copper content is greater than 85 per cent), immediate removal of the foreign body is then the only way to alleviate the inflammatory process, despite the inherent dangers of operating on an acutely and severely inflamed eye.

CHRONIC EFFECTS

Chronic inflammatory, chemical, and fibrotic effects are more or less inevitable, depending largely upon the chemical nature of the foreign body and on its intraocular location. They are particularly likely to occur in iron-containing foreign bodies, particularly when the iron is in a relatively pure state. Thus, a surgeon would ordinarily be more aggressive in attempting to remove such a retained object. The magnetic characteristics of the iron-containing foreign body would enhance his willingness to perform the surgery because of the applicability of magnetic extraction.

The opposite situation pertains to a non-magnetic foreign body such as a copper-containing alloy with low concentration of elemental copper. In such a circumstance the ultimate effects of chalcosis are ordinarily nowhere near as severe as in acute copper panophthalmitis, and not usually as severe as with a retained iron-containing foreign body. Thus, there would not be as high a priority to remove such a foreign body. The inapplicability of the magnet and the consequent requirement for more traumatic surgery would support this conservative judgment.

THERAPEUTIC JUDGMENT

The unwillingness of a surgeon to attempt extraction of a certain foreign body may be due to the fact that it is nonmagnetic, that it is invisible, or that it is trapped in fibrotic tissue or in inflammatory debris. Withholding surgery in those cases where extraction appears difficult should not be misconstrued as lack of courage or ability. The availability of surgical techniques in certain instances is simply not advanced enough to provide safe or successful manipulation within the globe.

Assuming that the foreign body remains in situ, inevitable destruction of the eye, even in iron-containing foreign bodies, may not occur. Certain foreign bodies may induce enough surrounding encapsulation that no diffusion of toxic or chemical substances occurs. Total dissolution of the foreign body without induced chemical changes may similarly occur, and spontaneous expulsion of the foreign body from a globe without attendant destruction of the eye has also been reported.²

In summary, decision to remove a foreign body or to leave it within an eye requires the exercise of mature therapeutic judgment. The decision-making process is exceedingly difficult in certain cases, and the patient should realize that penetrating injuries and retained ocular foreign bodies produce guarded prognoses, both for visual acuity and for retention of the globe, whether or not the foreign body is extracted or is allowed to remain within the globe.

AVAILABLE MAGNETS

Several magnets are available for use in removing magnetic foreign bodies from the posterior intraocular segment. The giant magnet, the permanent hand magnet, the hand electro-magnet, and the new Bronson-Magnion instrument⁵ are among them. The hand electro-magnet is extremely useful in most clinical circumstances, although extracting a foreign body from the posterior segment via an anterior wound of entry occasionally requires a more powerful magnet. The giant magnet requires considerably more careful preoperative and intraoperative planning and technical execution. Many of the problems attending the use of the hand electro-magnet and the giant magnet have been eliminated with the development of the Bronson-Magnion instrument, which is extremely powerful, but which is about the same in size as the hand electro-magnet. Despite considerable cost, the advantages of this new instrument are great.⁵

The attractive force of any magnet varies with the cube of the distance between it and the foreign body. Consequently, a foreign body, even if magnetic, cannot be extracted anteriorly if it lies too far posteriorly. If it is weakly magnetic or less than 1 mm. in size, similar difficulty may be encountered. The anterior route is dangerous if the foreign body is greater than 3 mm. in size or if it is jagged, since intact ocular structures can be irreparably damaged during such an extraction. A decision to extract a foreign body through the anterior segment requires knowledge of the state of the lens. If the lens is intact and transparent, a

posterior route of extraction should invariably be used, even if the wound of entry is in the limbal region. On the other hand, if the lens had been markedly disrupted by the entering foreign body, there is then much less hesitation towards performing an anterior extraction.

TRAUMATIC CATARACT

In most cases, removal of a traumatic cataract should not be performed at the time of foreign body extraction, unless extensive lens trauma has occurred. An unwary surgeon may be misled by the presence of inflammatory debris in the pupillary space and anterior chamber, the result of the original trauma, which may so mimic the presence of flocculent lens material that only the test of time will demonstrate the difference between the two. Consequently, lens extraction, whether it be intracapsular or extracapsular, should be deferred. Whenever lens extraction is performed, it should be recalled at all times that a penetrating injury through the lens produces disruption of the anterior hyaloid face and increases the risk of vitreous loss.

In performing magnetic extractions via the anterior route, the following technical measures are useful. As in all cases of magnetic foreign body extraction, the lid speculum and other instruments should be constructed of nonmagnetic materials. The bluntest magnet tip consistent with surgical exposure should be used, since it provides the strongest force, and the magnet tip should be brought as close to the foreign body as possible. Since magnets have much more strength when cold, intermittent short bursts of current are more effective than prolonged ones, which unfortunately, heat up the magnet.

After performing customary procedures to soften the eye (such as administration of a preoperative carbonic anhydrase inhibitor and a hyperosmotic agent), the magnet is directed at the original wound of entry, and the current is applied. If the foreign body is magnetic enough or is close enough to the magnet, there should be little difficulty in extracting it through the original wound of entry. Repositioning or excising prolapsed intraocular contents should then be performed in the usual fashion. The wound should be closed with interrupted sutures and the anterior chamber reformed with normal saline solution.

SECONDARY MANEUVERS

Occasionally, two directions of pull will be required: the first, in which the magnet is used to pull the foreign body into the anterior chamber; and the second, in which the magnet is then

used to extract the foreign body through a separate, newly created limbal incision. Such a secondary maneuver is useful when the corneal incision is small or self-sealing. The advantages of a new limbal incision are that it can be created under a conjunctival flap and that it can be made regular without jagged edges, consequently minimizing the danger of uveal tissue incarceration.

If the surgeon elects to remove the foreign body transsclerally, he must choose between the pars plana versus the actual site of the foreign body. If the foreign body lies within the vitreous chamber, it is frequently best to remove the foreign body through the pars plana. If the object is free-floating in the vitreous and can be easily moved about, the inferolateral pars plana is the usual area for extraction, since good surgical exposure is easily achieved in this location. If the foreign body is fixed in the vitreous chamber (surrounded by inflammatory or fibrotic material), the quadrant of the pars plana nearest the foreign body should be chosen for the extraction.

IMMEDIATE EXTRACTION

If the foreign body lies embedded in the wall of the eye, extraction should usually be performed immediately over the foreign body itself. Attempting a magnetic extraction via the pars plana in such circumstances can result in severe gashes in the retina as the foreign body is dragged anteriorly. However, if the foreign body lies embedded in the wall of the eye near the macula, optic nerve, or posterior ciliary vessels or nerves, extraction via the pars plana will obviate possible surgical trauma to those vital structures lying at the posterior pole of the eye. As in all such intraocular maneuvers, constant monitoring of the foreign body and of the retina should be performed during the actual surgical manipulations, whenever possible, with the binocular indirect ophthalmoscope.

For posterior route magnetic extractions through the pars plana, the aforementioned precautions involving preoperative lowering of the intraocular pressure should be followed. Attempts should also be made to minimize pressure on the globe and to reduce the chances of vitreous loss during the actual extraction of the foreign body. A conjunctival peritomy is helpful and should expose at least a full quadrant of the globe. Occasionally a more extensive peritomy is required, but, at any rate, the extraction attempt should not usually be made through a tiny conjunctival incision, because suboptimal exposure increases the hazards of surgery. Sling sutures under the two adjacent rectus muscles are helpful in

manipulating the globe. Occasionally, sling sutures under all four rectus muscles are required, and there should be no hesitation in extending the peritomy and placing these sutures if exposure is limited or if atraumatic rotation of the globe is difficult.¹

SCLERAL INCISION

A scleral incision calculated to be large enough to deliver the foreign body should be made to the external surface of the uveal tract. The site should be within the confines of the pars plana (anterior to the ora serrata). Although certain conventional measurements ostensibly represent the posterior limit of the pars plana (in millimeters from the limbus), the exact location of the pars plana varies considerably from case to case. Consequently, one should determine the location of the pars plana by transillumination. This can easily be performed at the operating table by directing a strong source of light through the pupil and noting the demarcation between the dark ciliary body and the more lightly pigmented retinal area. A preplaced suture should be inserted through the lips of the scleral incision and the magnet should then be directed at the slightly gaping wound.

Even if the magnet is activated correctly, the foreign body may not be removed initially. There are several explanations for this, including inappropriate selection of the magnet tip (particularly if a curved tip has been used), entanglement of the foreign body in fibrous and inflammatory debris, or a small or weakly magnetic foreign body. Extreme patience is often required before extraction of the foreign body can be accomplished. It is less important to point the magnet tip directly at the foreign object than it is to move the shortest tip that can be used under the conditions of surgical exposure as close as possible to the foreign body. Attempted induction of a point source of magnetic strength, by holding the magnet against a metallic instrument (which then is pointed towards the foreign body), is extremely inefficient and should not be employed.⁵

MAGNETIC EXTRACTION

Simultaneous use of the binocular indirect ophthalmoscope, whenever possible, provides assurance that the foreign body is being pulled by the magnet and that it is not entrapped in the retina, where it can cause large tears. Under most circumstances, if the foreign body can be attracted to the sclerotomy, it will cut its own way through

the uveal tract, whereupon the surgeon will perceive an audible click or a tactile impression from the magnet tip. Occasionally, however, the foreign body is too dull or the magnet too weak, and a stab incision of the pars plana (through the sclerotomy) must be performed with a small, sharp knife. The magnet is then reapplied, and the foreign body is extracted whilst all traction and pressure are relieved. The preplaced sclerotomy suture is immediately tied. In all such operations, the original, anterior wound of entry should have been previously sealed, either spontaneously or surgically. The sclerotomy site can be ringed either pre- or post-extraction with diathermy or cryotherapy in order to produce a firm adhesion of the uveal tract to the sclera.

If a foreign body is embedded in the wall of the eye and overlies the retina, and if a direct transcleral magnetic extraction is contemplated, precise localization is required in order to minimize trauma to the retina. Use of the indirect ophthalmoscope, the Berman metal locator, and, occasionally, placement of radiopaque scleral markers for intraoperative radiologic localizing procedures contribute in large measure to a successful extraction. For a direct posterior, transcleral extraction, a large conjunctival peritomy and sling sutures under most (or all) of the rectus muscles are required for adequate exposure and atraumatic manipulation and rotation of the globe. After precise localization of the foreign body, a scleral incision is made overlying it to the external surface of the uveal tract.

Under these conditions, ringed the sclerotomy site with diathermy or cryotherapy is considerably more important than in pars plana extractions, since postoperative vitreous traction at the wound of exit could conceivably produce retinal traction or hole formation (either at the exit site itself or at a point 180 degrees across the globe). Since the precise direction of pull of potential vitreous traction at the opposite side of the globe cannot be determined until after the fact, diathermy or cryotherapy to the opposite side of the globe should not be performed prophylactically. After a preplaced suture has been inserted in the lips of the small scleral incision, the magnet is applied; the foreign body either cuts its own way through the uveal tract, or is extracted after a uveal stab incision is made; and the preplaced suture is closed.

SCLERAL BED

Under most circumstances, this series of maneuvers is sufficient. However, if one anticipates significant vitreous traction, one may wish to extract the foreign body through a lamellar scleral

bed, prepared as in a routine scleral undermining procedure for repair of retinal detachment. The diathermized or cryothermized scleral bed is then buckled inward to reduce traction on the underlying retina. Alternatively, one can extract the foreign body through full-thickness sclera, followed by a Custodis-type scleral buckling procedure, using an exoplant of silicone rubber. The conjunctival peritomy is then closed, and the patient is treated in the customary fashion with pupillary dilatation, antibiotics and corticosteroids as indicated.

In the case of nonmagnetic foreign bodies, surgical maneuvers are considerably more difficult and potentially more disruptive to the vitreous, because of the commonly employed intravitreal manipulations. Direct transscleral extraction should be performed as in the previously described procedure for magnetic extraction. To minimize vitreous trauma, the sclerotomy must directly and precisely overlie the foreign body. If localization has been correct and precise (within 1 mm.), the scleral incision, performed in the manner already described, will provide direct visualization of the foreign body. If it lies within the wall of the eye, it can be simply lifted out of its resting place with forceps. Closure of the sclerotomy, with or without simultaneous scleral buckling, should be completed as detailed above.

USE OF FORCEPS

If the foreign body lies intravitreally, forceps can be inserted through a large pars plana sclerotomy under indirect ophthalmoscopic control. Since the indirect ophthalmoscope reverses the image, considerable familiarity with this instrument is a necessary prerequisite to successful intravitreal manipulation of forceps. Forceps with suture-tying platforms or with precisely apposed flat tips are useful in grasping the foreign body.

After the foreign body is removed, it occasionally will remain attached to a strand of vitreous. This should be cut flush with the sclerotomy using sharp scissors in order to prevent unnecessary tugging on the intraocular vitreous or on the retina. If this simple maneuver is not practiced, one may experience the unfortunate episode of having the foreign body retract inside the eye, due to the elastic effect of an attached strand of vitreous, or may subsequently encounter a large retinal hole.

If the pars plana route is employed, but the foreign body is invisible due to opaque media or to other reasons, one has recourse to several techniques. All, however, are hazardous and difficult, and none guarantees successful extraction of the

foreign body with preservation of good visual acuity. An ultrasonic probe with a forceps attachment at its tip has been developed for such cases. An experienced manipulator can perform the actual extraction in most cases, but only a minority of patients treated in this way recover good vision. Subsequent technical developments in this field may increase the salvage rate.

THORPE ENDOSCOPE

The Thorpe endoscope requires an experienced assistant, as well as an experienced operator, in order to prevent an excessive length of this large instrument from being shoved inside the eye.² A large pars plana incision, approximately 9 mm. in length, is required. This instrument does provide illumination within the eye as well as a chance to grasp the foreign body, but excessive heating of the vitreous by the illuminating source can occur with consequent clouding of the media. Other devices, such as an electrified forceps (which conveys an audible signal when its tips close down on a metal foreign body) and biplane fluoroscopy, have been developed within recent years in an attempt to improve the currently unfavorable prognosis of such situations. Proper evaluation of these instruments requires widespread use in several medical centers before unequivocal endorsement of their efficacy can be offered.

The prognosis for successful extraction depends on two major factors: the magnetic properties of the foreign body and the ease of visualizing it. If the foreign body is both magnetic and visible, the prognosis is most favorable. If the foreign body is magnetic but invisible, the prognosis worsens. If the foreign body is visible but nonmagnetic, the prognosis is even worse; and if it is both nonmagnetic and invisible, the prognosis is most grave. Even if extraction is performed successfully, however, the overall chance of recovering good visual acuity is only about 50 per cent.

The occurrence of intraocular foreign bodies, especially nonmagnetic ones, has not lessened as the result of technical advances in modern civilization and industry. The intensity of military actions in various parts of the world contributes, in large measure, to the frequency of such therapeutically difficult clinical situations. Justification for extensive, additional clinical research in the management of retained foreign objects is based on the large number of affected patients, the severe morbidity involved, and the currently rather gloomy prognosis. ★★★

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"I wouldn't miss it, man," was the reply.

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Intravenous Cholangiography

JAMES B. BARLOW, M.D.
Jackson, Mississippi

INTRAVENOUS CHOLANGIOGRAPHY has been accepted as a part of the armamentarium in diagnosis of biliary duct as well as gallbladder disease for more than a decade.

When we started doing intravenous cholangiography we had a heritage of intravenous pyelography. Our predecessors had told us to dehydrate and fast the patient for about 12 hours before the study. Since intravenous cholangiography was an intravenous procedure, it seemed the logical thing to do and all of us went down this road. So for a number of years, we dehydrated all our patients, starved them, and they came in miserable, without breakfast, and promptly proceeded to have a reaction.

Years ago someone from the Mayo Clinic said that to physicians many reactions are minor; to patients all reactions are major. This is true, and this is why one of the first things of interest that happened in intravenous cholangiography after many years of experience was a real way of reducing reactions.

Several months ago, following a report by Dr. Robert Wise at Lehey Clinic Foundation¹ on a scientific study, done at that institution, we started doing intravenous cholangiograms with the patient hydrated and following a light breakfast and have relatively few reactions and I therefore recommend this to you.

Since the search for common duct calculi is the most common indication for intravenous chol-

angiography, it is in this area in which diagnostic criteria have been most refined. They may be divided into the direct and indirect approach. We have all used the direct approach since the procedure was initiated and in this the calculus is manifested as a filling defect in the column of opacified bile.

Again, if we go back to experience with intravenous pyelography, a great deal of our diagnosis depends upon drainage of the ureter. At some point thirty or forty minutes after injection, we decide that if the ureter and upper calyceal system hasn't drained properly there must be some obstruction even though we don't see a stone. On intravenous cholangiography the cases in which calculi are present but impacted in the distal end of the common bile duct and not visible serious difficulties arise.² The size of the duct alone is of limited value in the diagnosis of partial obstruction. Other criteria were necessary if the diagnosis of partial obstruction was to be made with any degree of certainty. Out of this need grew the time-density retention concept; first presented in 1956 by Drs. Wise and O'Brian.³ Patients who have no obstruction in the common duct opacify their ducts rather fast, build to a peak of a crescendo and then opacification starts to decrease or drop off in 60 minutes or so. In patients who have obstruction, the opacification starts later, tends to reach a plateau, and does not drop off as rapidly.

On this basis the criteria for diagnosis of obstruction have been developed. If the 120 minute film shows an increase in density, in comparison

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Figure 1. 60 minute film following injection of Cholografin demonstrating the common duct (arrow).



Figure 2. 120 minute film following injection on the same patient demonstrating increasing opacification of the common duct, indicative of an element of distal obstruction.

with the 60 minute film, then there is a partial obstruction. This is the time-density retention concept which has stood the test of time, and has increased diagnostic accuracy.

Figure I is the 60 minute film from a study on a 49 year old female with right upper quadrant pain. Figure II is the 120 minute film from the same study and although no filling defect was seen there was an increase in density from the 60 minute to the 120 minute film and a diagnosis of partial obstruction was made. At the time of surgery, there was a small stone impacted in the very distal segment of the common duct.

SUMMARY

By doing intravenous cholangiograms with the patient well hydrated and following a light breakfast, one can greatly decrease the number and

severity of reactions to the contrast agent. By utilizing the rule of thumb formulated by Dr. Wise at Lehey Clinic, which says that if the 120 minute film shows an increasing density in comparison with a 60 minute film there is partial obstruction, one can greatly increase diagnostic accuracy.

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2. Wise, Robert E.: Current Concepts of Intravenous Cholangiography. The Radiological Clinic of North America, Vol. IV, No. 3:521-523, December, 1966.
3. Wise, R. E. and O'Brian, R. G.: Interpretation of the Intravenous Cholangiogram. J.A.M.A. 160:810-827 (March 10) 1956.

NEEDLESS WORRY

A couple visiting New Orleans decided to take their 10 year old son to one of the nightspots. They began to feel a little uneasy when a stripper appeared clad only in a scanty green and white ribbon. As the number ended, the boy leaned over and said, "Mom, did you see those?"

"See what?" asked the mother apprehensively.

"Those colors," replied the boy. "She was wearing our school colors!"

**EIGHTY-FIRST
ANNUAL MEETING
of the
MID-SOUTH
MEDICAL ASSOCIATION**

(Formerly Mid-South Postgraduate Medical Assembly)

MAY 27, 28, 29, 1970

at the

HOLIDAY INN-RIVERMONT

MEMPHIS, TENNESSEE

Outstanding speakers will present half-hour lectures on subjects of interest to both general practitioner and specialist. A well balanced program is scheduled. Make your plans to attend NOW!!

CLASS REUNIONS: Class of 1930; Class of 1935—March, June, September, December; Class of 1939—December; Class of 1940—March, June, September, December; Class of 1945—March, June, September, December; Class of 1950—March, June, September, December; Class of 1955—March, June, September; Class of 1956—June; Class of 1960—March, June, September, December; Class of 1956—March, June, September, December.

MAKE YOUR PLANS NOW TO ATTEND THE

MID-SOUTH MEDICAL ASSOCIATION

MAY 27, 28, 29, 1970

MEMPHIS

TENNESSEE

102nd Annual Session

Mississippi State Medical Association

May 11-14, 1970

Biloxi

MISSISSIPPI'S GULF COAST, bouncing back as the Riviera of the South from the ravages of Hurricane Camille, becomes the state's medical capital May 11-14 as the 102nd Annual Session of the association meets at the Hotel Buena Vista. Six general scientific sessions involving the seven formal sections, a dozen specialty groups, medical alumni occasions, technical and scientific exhibits, the House of Delegates, and a host of fellowship events are slated for the four-day meet.

Dr. James L. Royals of Jackson, association president, will address the opening meeting of the House of Delegates on May 11. House Speaker William E. Lotterhos of Jackson and Vice Speaker John B. Howell, Jr., of Canton said that reports and resolutions will be presented at the opening meeting. Final actions will come on May 14 when 1970-71 officers are elected.

Dr. Paul B. Brumby of Lexington will be inaugurated president for the new year during closing ceremonies on the final day.

Dr. Walter H. Simmons of Jackson said that the Scientific Assembly will open on Tuesday morning, May 12, and continue through Thursday noon. Dr. Simmons heads the group which has planned and scheduled the general and specialty session, exhibits, and fellowship occasions.

Principal speaker for the annual session is Dr. Gerald D. Dorman of New York, president of the American Medical Association. He is scheduled to address the opening meeting of the House of Delegates on May 11, Dr. Royals said.

The Woman's Auxiliary will conduct its 47th Annual Session concurrently during May 11-13, also headquartering at the Buena Vista, according to Mrs. Louis C. Lehmann of Natchez, state president. Mrs. Curtis W. Caine of Jackson will be inaugurated 1970-71 president at the meeting. General chairman for the ladies' meet is Mrs.

OFFICIAL CALL

To all members of the Mississippi State Medical Association:

The 102nd Annual Session of the Mississippi State Medical Association is called to meet at Biloxi, Mississippi, on Monday, May 11, 1970, pursuant to Article V of the Constitution. The House of Delegates will be convened at 9 o'clock in the morning at the Hotel Buena Vista on May 11.

The Scientific Assembly, consisting of the general sessions, will meet during May 12-14, 1970.

No member or guest will be permitted to participate in any aspect of the annual session until regularly registered.

JAMES L. ROYALS
PRESIDENT

WALTER H. SIMMONS
SECRETARY-TREASURER

David L. Clippinger of Hazlehurst, and Mrs. Steve Sekul of Biloxi is co-chairman.

Medical alumni occasions are set for Monday and Tuesday evenings, and the annual association party is the Wednesday feature.

The Buena Vista complex has virtually completed its rebuilding program following the devastation of Hurricane Camille last August. The hotel, high-rise motel, and original motel are operational with only a few rooms lacking in the motel section around the Olympic pool. The Buena Vista is accepting reservations subject to sell-out, after which registrants will be given priority at the White House and Tradewinds.

STATE OFFICERS 1969-70



DR. ROYALS

PRESIDENT
JAMES L. ROYALS
Jackson

PRESIDENT-ELECT
PAUL B. BRUMBY
Lexington

SECRETARY-TREASURER
WALTER H. SIMMONS
Jackson



DR. BRUMBY

VICE PRESIDENTS
G. LEROY HOWELL, Starkville
J. DAN MITCHELL, Jackson
JACK A. ATKINSON, Brookhaven

SPEAKER OF THE HOUSE
OF DELEGATES
WILLIAM E. LOTTERHOS, Jackson

VICE SPEAKER OF THE
HOUSE OF DELEGATES JOHN B. HOWELL, JR., Canton

EDITOR
W. MONCURE DABNEY, Crystal Springs

ASSOCIATE EDITORS
GEORGE H. MARTIN, Vicksburg
THOMAS W. WESSON, Tupelo

DELEGATES TO AMA
HOWARD A. NELSON, Greenwood
G. SWINK HICKS, Natchez

BOARD OF TRUSTEES

MAL S. RIDDELL, JR., Winona, Chairman
J. T. DAVIS, Corinth, Vice Chairman
WILLIAM O. BARNETT, Jackson, Secretary
JOHN M. ALFORD, JR., Greenwood
JAMES O. GILMORE, Oxford
GUY T. VISE, Meridian
W. E. MOAK, Richton
EVERETT CRAWFORD, Tylertown
JAMES T. THOMPSON, Moss Point

EXECUTIVE OFFICE

MR. ROWLAND B. KENNEDY, Executive Secretary
MR. H. C. HARRELL, Executive Assistant

LIVING PAST PRESIDENTS

A. STREET, Vicksburg	1941-42
B. S. GUYTON, Oxford	1950-51
JAMES GRANT THOMPSON, Jackson	1951-52
LAMAR ARRINGTON, Meridian	1952-53
S. LAMAR BAILEY, Kosciusko	1955-56
H. C. RICKS, Jackson	1956-57
HOWARD A. NELSON, Greenwood	1957-58
GUY T. VISE, Meridian	1958-59
STANLEY A. HILL, Corinth	1959-60
G. SWINK HICKS, Natchez	1960-61
LAWRENCE W. LONG, Jackson	1961-62
C. P. CRENSHAW, Collins	1962-63
OMAR SIMMONS, Newton	1964-65
EVERETT CRAWFORD, Tylertown	1965-66
JAMES T. THOMPSON, Moss Point	1966-67
TEMPLE AINSWORTH, Jackson	1967-68
JOSEPH B. ROGERS, Oxford	1968-69

ACTIVITIES CALENDAR

REGISTRATION

General registration for the Scientific Assembly and House of Delegates will be located in the Hurricane Foyer of the Buena Vista Hotel. No person may be admitted to any activity of the annual session without first registering. Hours of registration will be 1:00 to 4:00 p.m. Sunday, May 10; 8:00 a.m. to 5:00 p.m., Monday, Tuesday, and Wednesday, May 11-13; and 8:00 a.m. to 2:00 p.m. Thursday, May 14. The Secretary's Office will be located in Rooms 142-144.

SUNDAY, MAY 10, 1970

1:00 p.m. Mississippi Association of Pathologists, Surf Room

MONDAY, MAY 11, 1970

7:00 a.m. Reference Committees Breakfast, Sun Room

9:00 a.m. House of Delegates, Fountain Terrace

9:00 a.m. Mississippi Association of Pathologists, Surf Room

9:00 a.m. Woman's Auxiliary Hospitality, Fiesta Room

12:30 p.m. Mississippi Orthopaedic Society, Glass Room

2:00 p.m. Reference Committee on Reports of Officers and Board of Trustees, Fountain Terrace

2:00 p.m. Reference Committee on Miscellaneous Business, Gold Room South

3:00 p.m. Woman's Auxiliary Finance Committee, Fiesta Room

3:30 p.m. Reference Committee on Medical Practices, Sun Room

3:30 p.m. Council on Constitution and By-Laws, Surf Room

4:00 p.m. Woman's Auxiliary Preconvention Executive Board Meeting, Fiesta Room

4:00 p.m. Ole Miss Medical Alumni Business Meeting, Hurricane Room E

5:00 p.m. Auxiliary President's Reception, Glass Room

7:00 p.m. Ole Miss Medical Alumni Fellowship Hour, Dinner, and Dance, Gold Rooms North, Center, and South and Fountain Terrace

TUESDAY, MAY 12, 1970

8:00 a.m. Scientific Film Session, Hurricane Room E

9:00 a.m. General Scientific Session, Hurricane Room E

12:00 noon Mississippi Ob-Gyn Society, Luncheon, Sun Room

- 12:00 noon Fifty Year Club Luncheon, Surf Room
- 12:00 noon Woman's Auxiliary Luncheon, Fountain Terrace
- 12:00 noon American College of Surgeons Luncheon, Gold Room Center
- 1:00 p.m. Scientific Film Session, Hurricane Room E
- 1:30 p.m. American College of Surgeons, Gold Room South
- 2:00 p.m. General Scientific Session, Hurricane Room E
- 5:30 p.m. Vanderbilt Medical Alumni Fellowship Hour, Glass Room
- 6:00 p.m. Tulane Medical Alumni Fellowship Hour, Sun Room

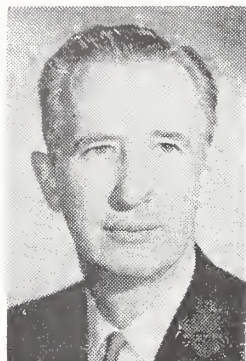
WEDNESDAY, MAY 13, 1970

- 7:30 a.m. MSMA Past Presidents' Breakfast, Fiesta Room
- 8:00 a.m. Woman's Auxiliary Complimentary Continental Breakfast, Gold Room South
- 8:00 a.m. Scientific Film Session, Hurricane Room E
- 9:00 a.m. Woman's Auxiliary General Session, Gold Room South
- 9:00 a.m. General Scientific Session, Hurricane Room E
- 12:00 noon Mississippi Psychiatric Society Luncheon, Sun Room
- 12:00 noon Mississippi Academy of General Practice Luncheon, Fountain Terrace
- 12:00 noon Mississippi Society of Internal Medicine Luncheon, Fiesta Room
- 12:00 noon Flying Physicians Association Luncheon, Surf Room
- 1:00 p.m. Scientific Film Session, Hurricane Room E
- 1:30 p.m. Nominating Committee, Glass Room
- 2:00 p.m. General Scientific Session, Hurricane Room E
- 2:30 p.m. Woman's Auxiliary Postconvention Executive Board Meeting, Gold Room South
- 7:00 p.m. Annual Association Party, Gold Rooms North, Center, and South and Fountain Terrace

THURSDAY, MAY 14, 1970

- 8:30 a.m. Woman's Auxiliary Past Presidents' Breakfast, Fiesta Room
- 8:30 a.m. Scientific Film Session, Hurricane Room E
- 9:30 a.m. General Scientific Session on Pediatrics, Hurricane Room E
- 10:00 a.m. General Scientific Session on EENT, Gold Room South
- 11:30 a.m. Mississippi Radiological Society Luncheon, Glass Room
- 12:00 noon Mississippi EENT Association Luncheon, Sun Room
- 1:30 p.m. House of Delegates, Fountain Terrace

EXECUTIVE BUSINESS



DR. LOTTERHOS

HOUSE OF DELEGATES

Monday, May 11, 1970
9:00 a.m.

Fountain Terrace
Buena Vista Hotel

William E. Lotterhos
Jackson, Speaker

John B. Howell, Jr.
Canton, Vice Speaker



DR. HOWELL

MEETINGS OF THE HOUSE OF DELEGATES

The opening meeting of the House will be called to order by the President, and the Speakers will announce the order of business. An open meeting, to which all members and ladies of the Auxiliary are invited, will feature addresses by Dr. James L. Royals, the president, and Dr. Gerald D. Dorman, president of the American Medical Association. The adjourned meeting of the House will convene in the Fountain Terrace Room at 1:30 p.m. on May 14.

REFERENCE COMMITTEES

Reports of Officers and Board of Trustees, May 11, Fountain Terrace, 2:00 p.m.

Miscellaneous Business, May 11, Gold Room South, 2:00 p.m.

Medical Practices, May 11, Sun Room, 3:30 p.m.

Constitution and By-Laws, May 11, Surf Room, 3:30 p.m.

Nominating Committee, May 13, Glass Room, 1:30 p.m.

THE SCIENTIFIC ASSEMBLY

COUNCIL ON SCIENTIFIC ASSEMBLY
WALTER H. SIMMONS, Chairman



DR. SIMMONS

THE COUNCIL

J. LEIGHTON PETTIS, Chairman, EENT
JAMES K. WILLIAMS, JR., Secretary

WILLIAM H. PARKER, Chairman, GENERAL PRACTICE
W. JOHNSON WITT, Secretary

BEN P. FOLK, JR., Chairman, MEDICINE
C. RALPH DANIEL, JR., Secretary

J. PURVES McLAURIN, JR., Chairman, OB-GYN
WARREN PLAUCHE, Secretary

BILL CARR, JR., Chairman, PEDIATRICS
WILLIAM F. SISTRUNK, Secretary

FRANK J. MORGAN, JR., Chairman, PREVENTIVE MEDICINE
FRANK M. WIYGUL, JR., Secretary

W. COUPERY SHANDS, Chairman, SURGERY
M. BECKETT HOWORTH, JR., Secretary

MEDICAL MOTION PICTURES

CALVIN T. HULL, Chairman

SCIENTIFIC AND TECHNICAL EXHIBITS

Hurricane Rooms A, B, C, and D
The Beuna Vista Hotel

CONDUCT OF THE SCIENTIFIC ASSEMBLY

The order of exercise, papers, and discussion as set forth in the official program shall be followed until completion. All papers read before the association shall become its property. Each paper must be read by its author and deposited with the Secretary (or Chairman) when read.

THE SCIENTIFIC EXHIBIT

Physicians, foundations, organizations, and major medical institutions will present the Scientific Exhibit. Physician-members of the Mississippi State Medical Association are eligible for the Aesculapius Award, an honorarium cash purse, given for excellence of presentation, quality of content, and originality. Others may not participate in this competition, but they are eligible for the association's Scientific Achievement Award, a sculptured bronze medallion, in recognition of the best presentation by a nonmember. The Scientific Exhibit is located in Hurricane Room D between the Technical Exhibit and the principal meeting auditorium.

EXHIBITS AND AUTHORS

"Nuclear Medicine in a General Hospital"

Ottis G. Ball, Elmer J. Harris, Robert P. Henderson, and James M. Packer, Radiological Group, Mississippi Baptist Hospital, Jackson

"The Children's Hospital—University Medical Center"

Blair E. Batson, Professor and Chairman, Department of Pediatrics, Jackson

"To Conquer Cervix Cancer"

Richard C. Boronow, Robert Smith, Durward Blakey, Kenneth Pittman, Carl Evers, Forrest Bratley, Guy Gillespie, Hardy Woodbridge, Frank Wiygul, and Walter H. Simmons, Jackson

"Cytopathology of the Female Genital Tract"

Forrest G. Bratley, William P. Featherston, Kenneth M. Heard, and Louis Schiesari, associates of the Central Cytopathology Laboratory, Jackson

"Diagnostic Peritoneal Irrigation: A Simple and Reliable Technique"

Major Joseph M. Civetta, USAF, MC, and Major William T. Ferguson, USAF, MC, USAF Medical Center, Keesler AFB

"Intravenous Regional Anesthesia, a Valuable Adjunct to Surgery"

R. J. Field, Jr., Centreville

"Cosmesis and Camouflage"

James H. Hendrix, Jr., H. C. Ethridge, and W. Douglas Godfrey, Jackson

"Total Intravenous Nutrition"

Richard C. Miller, Mart McMullan, and Pervie Simpson,
Division of Pediatric Surgery, University Medical Center,
Jackson

"The Evaluation of the Dizzy Patient"

James T. Robertson and Coyle Shea, Memphis

"Intracavitary Treatment of Malignant Brain Tumors"

Alex Sanford, Department of Neurosurgery, University
Medical Center, Jackson

"Complications of Hair Transplantation"

Dowling B. Stough, III, Hot Springs

"Coronary Arteriosclerosis: Surgical Treatment"

Charles W. Pearce and White E. Gibson, III, New Or-
leans

"Systemic Clues to Occult Cancer"

James P. Spell, Jackson

"Surgical Management of Coronary Occlusion"

Hilary H. Timmis, James D. Hardy, Patrick H. Lehan,
and Kenneth R. Bennett, Departments of Medicine and
Surgery, University Medical Center, Jackson

"Surgical Aspects of Cerebrovascular Disease"

Thomas L. Kilgore, J. Harvey Johnston, George E. Twente,
W. Couper Shands, James C. Griffin, Jackson

"Coronary Heart Disease"

Thomas L. Kilgore, J. Harvey Johnston, George E. Twente,
W. Couper Shands, James C. Griffin, Jackson

OLD MISS MEDICAL ALUMNI

University of Mississippi Medical Alumni will meet on Mon-
day, May 11. Alumni officials will conduct registration in the
general convention registration area at the Buena Vista where
tickets will be available for the evening party. A general busi-
ness meeting will be conducted at 4:00 p.m. in Hurricane Room
E. The fellowship hour, dinner, and dance will be conducted in
the Gold Rooms North, Center, and South and on the Fountain
Terrace beginning at 7:00 p.m., Dr. Hector S. Howard, Mem-
phis, president, presiding. Dr. Paul H. Moore of Pascagoula
is president-elect, Dr. James S. Fiskerly of Biloxi is program
chairman, and Mr. Charles William Price of Jackson is secre-
tary. Further details and advance tickets may be secured from
Mr. Price at the University Medical Center, Jackson.

THE TECHNICAL EXHIBIT

The Mississippi State Medical Association presents with pride the 1970 Technical Exhibit. Established firms engaged in the manufacture and distribution of pharmaceuticals, supplies, equipment, and in providing varied services will present exhibits. Visit each exhibit often and discuss products and services with the Professional Service Representatives. Only registered members and guests are admitted. The Technical Exhibit is located in the Hurricane Room, the Buena Vista Hotel.

EXHIBITORS	BOOTH
Abbott Laboratories, North Chicago, Ill.	9
Ayerst Laboratories, New York, N. Y.	32
Bedsole Surgical Supply Co., Inc., Mobile, Ala.	19
Bristol Laboratories, Syracuse, N. Y.	34
Carnation Company, Los Angeles, Calif.	43
Carnrick Laboratories, Cedar Knolls, N. J.	41
CIBA Pharmaceutical Co., Summit, N. J.	11
Coca-Cola USA, Atlanta, Ga.	12
The Emko Company, St. Louis, Mo.	42
Financial Service Corporation, Brookhaven, Miss.	4
Imperial Fashions, Los Angeles, Calif.	45
Kay Surgical, Inc., Jackson, Miss.	33
Lanier Company, Jackson, Miss.	30
Massachusetts Mutual Life Insurance Co., Jackson, Miss.	7
McNees Medical Supply Company, Jackson, Miss.	10
Mead Johnson Laboratories, Evansville, Ind.	1
Merck Sharp and Dohme, West Point, Penn.	5

Merrill Lynch, Pierce, Fenner and Smith, Inc., Jackson, Miss.	31
Meyer Laboratories, Inc., Fort Lauderdale, Fla.	18
Mississippi Hospital and Medical Service, Jackson, Miss.	44
Parke, Davis and Company, Detroit, Mich.	2
Wm. P. Poythress and Co., Inc., Richmond, Va.	20
A. H. Robins Company, Richmond, Va.	24
William H. Rorer, Inc., Fort Washington, Penn.	6
Sandoz Pharmaceuticals, Hanover, N. J.	35
W. B. Saunders Company, Philadelphia, Penn.	21
Schering Laboratories, Union, N. J.	8
Smith, Miller and Patch, Inc., New York, N. Y.	3
St. Paul Insurance Companies, St. Paul, Minn.	17
Stuart Pharmaceuticals, Pasadena, Calif.	22
Travelers Insurance Co., Jackson, Miss.	23
The Upjohn Company, Memphis, Tenn.	29

SCIENTIFIC GRANTS

Geigy Pharmaceuticals, Ardsley, N. Y.

SEMED Pharmaceuticals, San Francisco, Calif.

Smith, Kline and French Laboratories, Philadelphia, Penn.

Eli Lilly and Company, Indianapolis, Ind.

REGISTRATION FOR EXHIBIT PRIZES

Visit the Technical Exhibits often and qualify for the drawing of attractive prizes. Obtain necessary initials as you visit each booth. Deposit cards at Registration not later than 12:30 p.m., Thursday, May 14.

SCIENTIFIC PROGRAM

Tuesday, May 12, 1970
Hurricane Room E
Beginning at 9:00 a.m.

W. Couperly Shands, Jackson
Chairman

M. Beckett Howorth, Jr., Oxford
Secretary



DR. SHANDS

INTESTINAL OBSTRUCTION IN THE NEWBORN
Richard C. Miller, Jackson

THE PRESENT STATUS OF MYOCARDIAL REVASCULARIZATION
John L. Ochsner, New Orleans

THE SURGICAL ASPECTS OF THE THYMUS
Philip E. Bernatz, Rochester, Minnesota

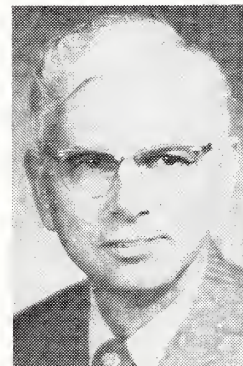
AMPUTATIONS IN PATIENTS WITH PERIPHERAL VASCULAR DISEASE
Richard Warren, Boston

SCIENTIFIC PROGRAM

Tuesday, May 12, 1970
Hurricane Room E
Beginning at 2:00 p.m.

J. Purves McLaurin, Jr., Oxford
Chairman

Warren C. Plauche, Biloxi
Secretary



DR. MCLAURIN

FAMILY PLANNING IN MISSISSIPPI, PRESENT AND NEAR FUTURE
George R. Huggins, Jackson

DIAGNOSIS AND MANAGEMENT OF SECONDARY AMENORRHEA
Donald A. Goss, Nashville

MATERNAL MORTALITY RELATED TO ANESTHESIA, 1957-1967, STATE
OF MISSISSIPPI
Donald M. Sherline, Jackson

THE ADOLESCENT'S SOCIAL AND SEXUAL DEVELOPMENT IN THE
UNITED STATES—A REVIEW OF CHANGING CONCEPTS
Kermit E. Krantz, Kansas City

COMPLICATIONS RELATIVE TO THE USE OF THE BIRTH CONTROL
PILL

George Ball, Jackson, Moderator

Panel: Drs. Goss, Krantz, Herbert G. Langford of Jackson
and J. Leighton Pettis of Tupelo

SCIENTIFIC PROGRAM

Wednesday, May 13, 1970
Hurricane Room E
Beginning at 9:00 a.m.

Frank J. Morgan, Jr., Jackson
Chairman

Frank M. Wiygul, Jr., Jackson
Secretary



DR. MORGAN

COMMUNITY MENTAL HEALTH CENTERS
Mary Alice Lee, Jackson

YOUTH AND DRUGS
Judge Carl E. Guernsey, Jackson

SCIENTIFIC PROGRAM

Wednesday, May 13, 1970
Hurricane Room E
Beginning at 10:00 a.m.

William H. Parker, Heidelberg
Chairman

W. Johnson Witt, Jackson
Secretary



DR. PARKER

THE FAT DIABETIC
Buris R. Boshell, Birmingham

PITFALLS OF EYE CARE IN INDUSTRIAL PRACTICE
James K. Williams, Jr., Pascagoula

INDUSTRIAL BACK INJURIES
John G. Caden, Jr., and William C. Warner, Jackson

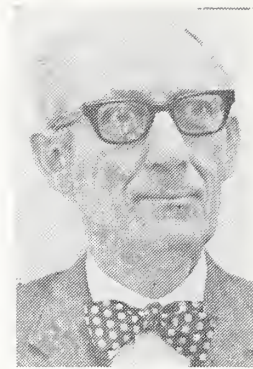
FINGERTIP INJURIES AND FRACTURES OF THE HAND
Claude S. Williams, New Orleans

SCIENTIFIC PROGRAM

Wednesday, May 13, 1970
Hurricane Room E
Beginning at 2:00 p.m.

Ben P. Folk, Jr., Jackson
Chairman

C. Ralph Daniel, Jr., Jackson
Secretary



DR. FOLK

CERTAIN CURRENT CONCEPTS OF IMMUNOLOGICAL DISEASES
Frederic C. McDuffie, Rochester, Minnesota

MENINGOCOCCAL SEPTICEMIA
Robert E. Blount, Jackson

CURRENT LABORATORY EVALUATION OF LIPID DISORDERS
William B. Wilson, Jackson

HEREDITARY ENZYMATIC DEFECTS OF THE RED CELL—CLINICAL
IMPLICATIONS
Francis S. Morrison, Jackson

SCIENTIFIC PROGRAM

Thursday, May 14, 1970
Hurricane Room E
Beginning at 9:30 a.m.

Bill Carr, Jr., Gulfport
Chairman

William F. Sistrunk, Jackson
Secretary



DR. CARR

CURRENT IMMUNIZATION TRENDS AND INDICATIONS FOR THE NEWER
LIVE VIRUS VACCINES
Mark A. Belsey, New Orleans

PEDIATRIC HEMATOLOGICAL PROBLEMS
Jeanette Pullen, Jackson

RECENT TRENDS IN NEWBORN NURSERY CARE, INCLUDING PHOTO-
THERAPY OF JAUNDICE
Alfred W. Brann, Jackson

SCIENTIFIC PROGRAM

Thursday, May 14, 1970
Gold Room South
Beginning at 10:00 a.m.

J. Leighton Pettis, Tupelo
Chairman

James K. Williams, Jr., Pascagoula
Secretary



DR. PETTIS

CEREBELLOPONTINE ANGLE TUMORS—EARLY DIAGNOSIS AND SURGICAL TREATMENT

James T. Robertson and Coyle Shea, Memphis

DIABETIC RETINOPATHY

David Meyer, Memphis

GOLF TOURNAMENT

The annual association golf tournament will be conducted at the Sunkist Country Club on Wednesday, May 13, Dr. A. V. Hays, Gulfport, chairman. The \$12 entrance fee includes one green fee ticket and two 19th Hole refreshment tickets. Awards to winners will be made at 5:00 p.m. in the clubhouse. Handicaps are not needed, the two flights being divided among those over and under 55 years of age. Advance registration is encouraged, sending name and fee to Dr. Hays at the ENT Hospital, 13th and 31st Avenue, Gulfport 39501. Tuesday rounds are acceptable for the single round 18 hole play. Pre-registrants may pick up tickets at the pro shop; others at General Registration at the Buena Vista Hotel.

ANNUAL ASSOCIATION PARTY

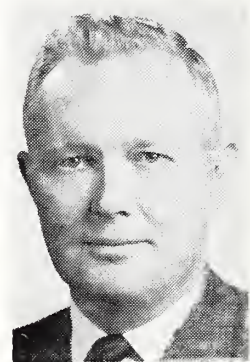
Fun, food, fellowship, and frolic highlight Wednesday evening, May 13, at the annual association, no-theme party in the Gold Rooms North, Center, South and the Fountain Terrace. Fellowship begins at 7:00 p.m., continuing through dinner and dancing with Ed Butler and his Orchestra. Tickets will be available at General Registration in the Hurricane Room Foyer.

VISITING ESSAYISTS



DR. BELSEY

MARK A. BELSEY, M.D., New Orleans, Louisiana. Acting Chairman of Epidemiology, Tulane University. Medical Education, New York Medical College, 1960. Diplomate, American Board of Pediatrics.



DR. BERNATZ

PHILIP E. BERNATZ, M.D., Rochester, Minnesota. Associate Professor of Surgery, Mayo Graduate School of Medicine, University of Minnesota. Medical Education, State University of Iowa, 1944. Diplomate, American Boards of Surgery and Thoracic Surgery.



DR. BOSHELL

BURIS R. BOSHELL, M.D., Birmingham, Alabama. Professor of Medicine, Medical College of Alabama. Medical Education, Harvard Medical School, 1953. Diplomate, American Board of Internal Medicine.



DR. DORMAN

GERALD D. DORMAN, M.D., New York. President, American Medical Association. Medical Education, Columbia University College of Physicians and Surgeons, 1929. Diplomate, American Board of Preventive Medicine.

DONALD A. GOSS, M.D., Nashville, Tennessee. Professor and Chairman of Obstetrics and Gynecology, Vanderbilt University. Medical Education, Harvard Medical School, 1959. Diplomate, American Board of Obstetrics and Gynecology.



DR. GOSS



JUDGE GUERNSEY

HON. CARL E. GUERNSEY, Jackson. Professional Education: Millsaps College, B.A.; University of Mississippi School of Law, LL.B. Presiding Judge, Hinds County Court and Youth Court.

KERMIT E. KRANTZ, M.D., Kansas City, Kansas. Professor and Chairman of Obstetrics and Gynecology, University of Kansas. Medical Education, Northwestern University Medical School, 1948. Diplomate, American Board of Obstetrics and Gynecology.



DR. KRANTZ



DR. MCDUFFIE

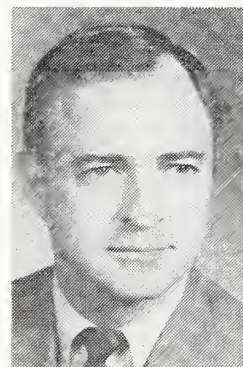
FREDERIC C. MCDUFFIE, M.D., Rochester, Minnesota. Assistant Professor of Medicine, University of Minnesota. Medical Education, Harvard Medical School, 1951. Diplomate, American Board of Internal Medicine.

VISITING ESSAYIST



DR. MEYER

DAVID MEYER, M.D., Memphis, Tennessee. Instructor, Department of Ophthalmology, University of Tennessee. Medical Education, University of Tennessee, 1962. Diplomate, American Board of Ophthalmology.



DR. OCHSNER

JOHN L. OCHSNER, M.D., New Orleans, Louisiana. Clinical Associate Professor, Tulane University, and Chairman of Surgery, Ochsner Clinic. Medical Education, Tulane University, 1952. Diplomate, American Boards of Surgery and Thoracic Surgery.



DR. WARREN

RICHARD WARREN, M.D., Boston, Massachusetts. Professor of Surgery, Harvard Medical School. Medical Education, Harvard Medical School, 1934. Diplomate, American Board of Surgery.



DR. WILLIAMS

CLAUDE S. WILLIAMS, M.D., New Orleans, Louisiana. Instructor, Tulane University School of Medicine. Medical Education, Tulane University, 1959. Diplomate, American Board of Orthopaedic Surgery.

WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

47th Annual Session
Buena Vista Hotel
May 11-13, 1970



MRS. LEHMANN

OFFICERS

MRS. LOUIS C. LEHMANN
Natchez
President

MRS. CURTIS W. CAINE
Jackson
President-elect



MRS. CAINE

ANNUAL SESSION CHAIRMEN

MRS. DAVID L. CLIPPINGER
Hazlehurst
General Chairman

MRS. STEVE SEKUL
Biloxi
Co-Chairman

MRS. G. SWINK HICKS
MRS. SIDNEY O. GRAVES, JR.
Natchez
Luncheon

MRS. NICHOLAS DISANTI
Pascagoula
Registration

MRS. H. LOWRY RUSH, JR.
Meridian
Publicity

MRS. JAMES T. THOMPSON
Moss Point
VIP and Transportation

AUXILIARY

Sunday, May 10, 1970

2:00 p.m. Registration, Buena Vista Lobby

102ND ANNUAL SESSION

Monday, May 11, 1970

- 9:00 a.m. Registration, Lobby
- 9:00 a.m. Auxiliary Hospitality, Fiesta Room
- 3:00 p.m. Finance Committee, Mrs. A. T. Tatum, Fiesta Room
- 4:00 p.m. Preconvention Executive Board Meeting, Mrs. Louis C. Lehmann, Presiding, Fiesta Room
- 5:00 p.m. President's Reception, Glass Room, for the Executive Board and Auxiliary members arriving early

Tuesday, May 12, 1970

- 9:00 a.m. Registration, Lobby
- 12:00 noon Luncheon, Fountain Terrace
 - Adams County Auxiliary
 - Mrs. Kurtz B. Stowers, President
 - Mrs. G. Swink Hicks and Mrs. Sidney O. Graves, Jr., Luncheon Chairmen
 - Theme: "Happiness is . . ."
 - Mrs. Louis C. Lehmann, Presiding
 - Invocation
 - Introduction of Guests
 - Guest Speaker
 - Mrs. G. Prentiss Lee, Portland, Ore.
 - First Vice President, Woman's Auxiliary to the American Medical Association
- 3:00 p.m. Optional Tour, Beauvoir
 - Admission \$.75 per person
 - Meeting in Lobby at 2:30 p.m. for Transportation

Wednesday, May 13, 1970

- 8:00 a.m. Registration, Lobby
- 8:00 a.m. Complimentary Continental Breakfast for Auxiliary Members, Gold Room South
- 9:00 a.m. General Session, Gold Room South
 - Mrs. Louis C. Lehmann, Presiding
 - Invocation
 - Auxiliary Pledge
 - Mrs. Clarence H. Webb, Jr., Jackson
 - Welcome
 - Mrs. Maurice A. Taquino, Ocean Springs

Response

Mrs. Jack A. Stokes, Pontotoc

Introductions

Greetings

James L. Royals, M.D., Jackson
President, MSMA

Paul B. Brumby, M.D., Lexington
President-elect, MSMA

Credentials and Registration

Mrs. Nicholas DiSanti, Pascagoula

Roll Call

Minutes

President's Report

Mrs. Louis C. Lehmann, Natchez

Treasurer's Report

AMA-ERF Report

Mrs. A. E. Brown, Columbus

Finance Report

Mrs. A. T. Tatum, Hattiesburg

Appointment of Delegates to AMA Auxiliary

Unfinished Business

New Business

Memorial Service

Mrs. James W. Allison, Jr., Vicksburg

Report of the Nominating Committee

Mrs. Paul B. Brumby, Lexington

Election of Officers

Installation of Officers

Courtesy Resolution

Mrs. James V. Ferguson, Jr., Greenwood

Adjournment

2:30 p.m. Postconvention Executive Board Meeting

Mrs. Curtis W. Caine, Presiding
Gold Room South

7:00 p.m. Annual Mississippi State Medical Association Party

Fountain Terrace and Gold Rooms, North Center,
and South

Thursday, May 14, 1970

8:30 a.m. Past Presidents' Breakfast, Fiesta Room

Mrs. Paul B. Brumby, Presiding

AMERICAN COLLEGE OF SURGEONS,
MISSISSIPPI CHAPTER

Buena Vista Hotel
Tuesday, May 12, 1970

RICHARD F. RILEY, Meridian, President

DAWSON B. CONERLY, JR., Hattiesburg, President-elect

ALBERT L. MEENA, Jackson, Secretary

12:00 noon Luncheon and Business Meeting, Gold Room Center
Members and Guests

1:30 p.m. Scientific Program, Gold Room South
All MSMA Members Are Invited
TREATMENT OF VENOUS THROMBOEMBOLISM
Richard Warren, Boston

2:15 p.m. THE SURGICAL MANAGEMENT OF FUNCTIONAL DIS-
EASES OF THE ESOPHAGUS
Philip E. Bernatz, Rochester, Minnesota

3:00 p.m. PROBLEM CASES IN SURGERY
Frank H. Tucker, Jr., Meridian
Benton M. Hilbun, Tupelo
Richard C. Boronow, Jackson
T. E. Ross, III, Hattiesburg

MISSISSIPPI SOCIETY OF ANESTHESIOLOGISTS

The Mississippi Association of Anesthesiologists will meet at the University Medical Center, Jackson, on Sunday, May 10. The guest speaker will be Dr. Richard C. Miller of Jackson, UMC Assistant Professor of Surgery (Pediatric Surgery), who will speak on "Fluid Balance in Pediatric Surgical Patients." Society officers are Drs. Leonard W. Fabian of Jackson, president; Robert B. Thompson of Jackson, president-elect; and Richard C. Snow of Jackson, secretary.

MISSISSIPPI ASSOCIATION OF PATHOLOGISTS

Members of the Mississippi Association of Pathologists will meet on Sunday and Monday, May 10 and 11. Activities will begin at 1:00 p.m. in the Surf Room on Sunday and continue on Monday with a further session at 9:00 a.m., also in the Surf Room. Dr. George M. Sturgis of Jackson is president, and Dr. William V. Hare of Jackson is secretary.

REFERENCE COMMITTEES BREAKFAST

Members of all Reference Committees of the House of Delegates will meet for breakfast on Monday morning, May 11, in the Sun Room at 7:00 a.m. Hosts are Drs. William E. Lotterhos of Jackson, Speaker of the House of Delegates, and John B. Howell, Jr., of Canton, Vice Speaker. The meeting is important in that Reference Committee members will be oriented as to duties and the conduct of hearings later in the day.

MISSISSIPPI ORTHOPAEDIC SOCIETY

A luncheon meeting of the Mississippi Orthopaedic Society will be conducted in the Glass Room on Monday, May 11, at 12:30 p.m. A program will follow the luncheon. Officers are Drs. William B. Thompson of Jackson, president; Daniel J. Enger of Pascagoula, president-elect; James O. Manning of Jackson, vice president; and Louis A. Farber of Jackson, secretary.

FIFTY YEAR CLUB

Members of the Mississippi State Medical Association's Fifty Year Club will be honored at a luncheon on Tuesday, May 12, in the Surf Room. Dr. Mal S. Riddell, Jr., of Winona, chairman of the Board of Trustees, will preside, and Mrs. Cindy Sanders of the MSMA staff is secretary.

MISSISSIPPI OB-GYN SOCIETY

The Mississippi Ob-Gyn Society will conduct a luncheon meeting on Tuesday, May 12, in the Sun Room at 12:00 o'clock noon. Officers of the society are Drs. William S. Cook of Jackson, president and meeting chairman; William R. Raulston of Hattiesburg, president-elect; and George Ball of Jackson, secretary.

VANDERBILT MEDICAL ALUMNI

Vanderbilt Medical Alumni will meet at a reception on Tuesday, May 12 from 5:30 until 7:00 in the evening in the Glass Room. Hosts for the reception are Drs. Archie C. Hewes and Edward C. Hamilton of Gulfport. The guest of honor will be Dr. John L. Shapiro, professor and chairman of the Department of Pathology. Arrangements are under the charge of Mrs. Sue F. Segrest, director of Medical Alumni and Development Affairs.

TULANE MEDICAL ALUMNI

Medical Alumni of the Tulane University will enjoy a fellowship hour from 6:00 until 8:00 on Tuesday evening, May 12, in the Sun Room. Dr. Maxwell E. Lapham, Executive Secretary of the Medical Alumni Association, and Miss Rose B. Koppel of his office are in charge of arrangements.

MSMA PAST PRESIDENTS' BREAKFAST

Past Presidents of the Mississippi State Medical Association will enjoy a breakfast meeting on Wednesday morning, May 13, in the Fiesta Room at 7:30 a.m. Dr. Joseph B. Rogers of Oxford is host.

MAGP LUNCHEON

The Mississippi Academy of General Practice will sponsor a luncheon at 12:00 o'clock noon on Wednesday, May 13, on the Fountain Terrace. Officers are Drs. Walter W. Crawford of Tylertown, president; William H. Parker of Heidelberg, president-elect; John G. Atwood of Meridian, secretary-treasurer; and Miss Louise Lacey of Jackson, executive secretary. A special guest speaker will be featured.

FLYING PHYSICIANS ASSOCIATION

The Flying Physicians Association and nonmembers interested in private aviation will enjoy a luncheon on Wednesday, May 13, in the Surf Room at 12 o'clock noon. The Mississippi president is Dr. Jim C. Barnett of Brookhaven.

MISSISSIPPI SOCIETY OF INTERNAL MEDICINE

A luncheon meeting of the Mississippi Society of Internal Medicine will be held on Wednesday, May 13, at 12:00 o'clock noon in the Fiesta Room. Officers of the society are Drs. Ben P. Folk, Jr., of Jackson, president and meeting chairman; William C. Kellum of Tupelo, president-elect; and S. H. McDonnial, Jr., of Jackson, secretary.

MISSISSIPPI PSYCHIATRIC ASSOCIATION

Members of the Mississippi Psychiatric Association will meet in the Sun Room on Wednesday, May 13, for a luncheon and special program at 12:15 p.m. Officers are Drs. George C. Hamilton, Jr., of Jackson, president; William H. C. Dudley of Whitfield, president-elect and meeting chairman; and William C. McQuinn of Jackson, secretary.

MISSISSIPPI RADIOLOGICAL SOCIETY

The Mississippi Radiological Society will sponsor a luncheon meeting on Thursday, May 14, in the Glass Room, beginning at 11:30 a.m. Officers of the society are Drs. Clyde Smith of Greenwood, president; James B. Barlow of Jackson, president-elect; and Ottis G. Ball of Jackson, secretary.

MISSISSIPPI EENT ASSOCIATION

The Mississippi Eye, Ear, Nose, and Throat Association will conduct a business meeting and luncheon on Thursday, May 14, in the Sun Room at 12:00 o'clock noon. Officers are Drs. Samuel B. Johnson of Jackson, president and meeting chairman; Chester W. Masterson of Vicksburg, president-elect; and Ben McCarty, Jr., of Jackson, secretary.

Handbook of the House of Delegates

Mississippi State Medical Association
102nd Annual Session, Biloxi
May 11-14, 1970

SUPPLEMENTAL REPORT "A" OF THE SECRETARY-TREASURER

Vacancies in Elected Offices. Effective May 14, 1970, there will occur 25 vacancies in elected offices in the association by reason of expiration of prescribed terms of service. In accordance with applicable portions of the By-Laws, the Nominating Committee will be asked to deliberate, consult with colleagues, and make nominations to the House of Delegates for consideration and voting to elect successors or to re-elect incumbents.

Eligibility. To be nominated for office in the association, a nominee must have been a member for two years and must have attended two of the past three annual sessions, including the present one. A member may not serve more than three consecutive terms as a member of the Board of Trustees or a council. No incumbent is ineligible for re-election by reason of three terms of service.

Vacancies for Nomination. Following is a listing of vacancies which will occur during the 102nd Annual Session as well as requirements for nominations and identity of incumbents:

President-elect

Nominate three, no two of whom may be from the same county, elect one.

Vice Presidents

Nominate three for the Northern Area, three for the Mid-State Area, and three for the Southern Area. Elect one for each area.

Secretary-Treasurer

Term 1970-73. Nominate three, elect one. Incumbent: Walter H. Simmons, Jackson.

HANDBOOK INFORMATION

The Speaker and Vice Speaker of the House of Delegates herewith present for the information of all members those reports and resolutions as have been received for publication in advance of the 102nd Annual Session. It is the intent of this advance publication to inform the membership and to afford all concerned the opportunity to confer with delegates over any aspect of the reports and resolutions.

No report or resolution herein becomes official or a statement of policy until formally presented to the House of Delegates and acted upon at the annual session.

WILLIAM E. LOTTERHOS
SPEAKER

JOHN B. HOWELL, JR.
VICE SPEAKER

Speaker of the House of Delegates

Term 1970-73. Nominate three, elect one. Incumbent: William E. Lotterhos, Jackson.

Vice Speaker of the House of Delegates

Term 1970-73. Nominate three, elect one. Incumbent: John B. Howell, Jr., Canton.

Associate Editor

Term 1970-72. Nominate two, elect one. Incumbent: George H. Martin, Vicksburg.

Delegate to AMA

Term Jan. 1, 1971-Dec. 31, 1972. Nominate two, elect one. Incumbent: Howard A. Nelson, Greenwood.

Alternate Delegate to AMA

Term Jan. 1, 1971-Dec. 31, 1972. Nominate two, elect one. Incumbent: Stanley A. Hill, Corinth.

Board of Trustees, Districts 1, 2, and 3

Terms 1970-73. Nominate two for each district, elect one for each district. Incumbents: John M. Alford, Greenwood, District 1; James O. Gilmore, Oxford, District 2; and J. T. Davis, Corinth, District 3.

Council on Budget and Finance

Term 1970-73. Nominate two, elect one. Incumbent: Daniel L. Hollis, Biloxi.

Council on Constitution and By-Laws

Term 1970-73. Nominate two, elect one. Incumbent: Arthur E. Brown, Columbus.

Judicial Council, Districts 7, 8, and 9

Terms 1970-73. Nominate two for each district, elect one for each district. Incumbents: J. P. Culpepper, Jr., Hattiesburg, District 7; Leo J. Scanlon, Jr., Natchez, District 8; and James T. Thompson, Moss Point, District 9.

Council on Legislation, Districts 4, 5, and 6

Terms 1970-73. Nominate two for each district, elect one for each district. Incumbents: Paul B. Brumby, Lexington, District 4; George E. Twente, Jackson, District 5; and Guy T. Vise, Meridian, District 6.

Council on Medical Education

Term 1970-73. Nominate two, elect one. Incumbent: Frederick E. Tatum, Hattiesburg.

Council on Medical Service, Districts 7, 8, and 9

Terms 1970-73. Nominate two for each district, elect one for each district. Incumbents: Charles R. Jenkins, Laurel, District 7; Jack A. Atkinson, Brookhaven, District 8; and Bedford F. Floyd, Gulfport, District 9.

Mississippi State Board of Health

No vacancies will occur in 1970 among physician-members.

Reporting Format. Your Delegates to the American Medical Association continue to limit their joint report to this House of Delegates to key policy actions at the annual and clinical conventions. Because of excellent and detailed reporting in the *American Medical News* and *Journal AMA* of scientific and subsidiary activities, these aspects would only be needless repetitions and duplications.

Dr. G. Swink Hicks of Natchez completed his first full term of two years in 1969 and began serving his second term to which he was re-elected in 1969 on Jan. 1, 1970. The senior Delegate, Dr. Howard A. Nelson of Greenwood, will complete his second full term during the current year. Our able Alternate Delegates are Drs. Stanley A. Hill of Corinth and Joseph B. Rogers of Oxford.

The present reporting covers the 118th Annual Convention at New York, July 13-17, and the 23rd Clinical Convention at Denver, Nov. 30-Dec. 3, both 1969. We are grateful for the attendance, participation, and support at these meetings of our president, Dr. Royals, and our president-elect, Dr. Brumby. Many other Mississippi physicians attended and participated in these conventions, contributing to scientific and business activities.

New York Annual Convention. The House of Delegates considered 59 reports and 137 resolutions, meeting in formal session about 16 hours over four days. Distinguished speakers included Vice President Agnew and Dr. Roger O. Egeberg, Assistant Secretary of HEW for Health and Scientific Affairs.

Major items of business and policy included peer review, health care of the poor, medical care as a matter of right, Medicare and Medicaid, relations with hospitals, laboratory advertising and billing, sex education, and internal organization and finances of AMA.

The House moved decisively on peer review, encouraging full and complete participation and implementation at all levels of medical organization. The House stated that it "knows of no greater challenge facing the profession today than to secure universal acceptance and application of the peer review concept. . . ." The action made it clear that should medicine fail in meeting this challenge, the task will be done for us and not on our terms.

In this same connection, the delegates recognized the physician's influence on the cost of care, stating that "the doctor has a significant and responsible role in any organized effort to control health care expenditures." With specific

reference to Medicare and Medicaid, the House took four major actions:

—Expanded peer review at component society level to reduce hospital and extended care facility stay and to expand ambulatory care.

—Eradication by the profession of isolated abuses by physicians.

—Promotion of innovative health service delivery systems for low income communities.

—Preservation of care quality in the face of cost containment measures.

But in the matter of Social Security Administration fee freezes, the House said that the setting of "rigid limits on levels of payments to physicians who provide services appear in contradiction to Congressional intent" that these patients receive care on the same basis as private patients. A call was made for the Congress to reassess its intent and priorities in relation to Title XIX.

The AMA again asked for the identities of physicians said to have abused Medicare and Medicaid and condemned the practice of release by government agencies of gross amount paid to individuals and groups under the programs without further explanation, giving a frequently false impression of abuse.

Your Delegates introduced a resolution in response to the mandate given us in Resolution No. 3, subject: JAMA Laboratory Advertising, at our 101st Annual Session. A number of similar resolutions were introduced by other states. Despite diligent and persistent effort, the House concurred with the Judicial Council's views that the advertising pages of *Journal AMA* cannot be denied a lawful activity, including independent laboratories with industrial sponsorship.

The frequently discussed and sometimes misunderstood position on medical care as a right was clarified to the extent of a policy statement:

—That it is a basic right of every citizen to have available to him adequate health care.

—That it is a basic right of every citizen to have free choice of physician and institutions in obtaining medical care.

—That the medical profession, using all means at its disposal, should endeavor to make good medical care available to each person.

A preliminary policy on health care of the poor states that comprehensive services in this connection are desirable, that it must be a long-range, continuing program, that research on unmet needs which is documented should be implemented, that the poor should participate in planning at community level, and that physicians should work with organizations in and out of

medicine where concern for care of the poor has been expressed.

The Scientific Assembly was reorganized with the several specialty societies having been given a stronger voice in the affairs of their respective sections. Each of the 24 scientific sections is to be governed by a section council whose members are selected by the appropriate specialty society. The new format becomes effective Jan. 1, 1972.

By-Laws relating to membership eligibility were amended to permit qualified osteopaths to become full, active members. While conceding that the primary responsibility for family life education is in the home, the House "supported in principle the inauguration by State Boards of Education or school districts, whichever is applicable, of a voluntary family life and sex education program at appropriate grade levels." The House supported the integrity of hospital medical staffs in self-government, having previously endorsed the concept of voting membership on hospital governing boards for physicians.

The financial picture for AMA is not bright with mounting costs, broadened areas of activity, and about \$4 million due in federal income taxes on advertising. We foresee a dues increase to \$100 per year effective in 1971.

At the New York convention, the House of Delegates took a unique action, electing a number of senior state medical association and national specialty society executives to membership in AMA. Our Executive Secretary, Mr. Rowland B. Kennedy, was among them.

Denver Clinical Convention. Major actions at the Denver Clinical Convention included conclusive actions on health care of the poor, long-range planning for AMA, discontinuation of the AMA-ERF Institute for Biomedical Research, a statement of policy on marijuana, private practice, governmental delivery programs, and costs of medical care. The House of Delegates acted on 99 items of business among which were 33 reports and 66 resolutions.

In taking definitive actions on health care of the poor, the House reaffirmed its policy on medical care as a basic right, calling for increased funding of effective government programs, projects to eliminate unfavorable environmental conditions, increased physician services in the urban slums, expansion of health careers by recruitment from disadvantaged areas, better prenatal and postnatal care, family planning services, a crack-down on quackery which exploits the poor, improved mental health services programs, and more participation in AMA activities by minority group physicians.

(Turn to page 200)



The President Speaking

'Continuum of Crisis'

JAMES L. ROYALS, M.D.

Jackson, Mississippi

BEING PRESIDENT of the state medical association when the Legislature is in session is an interesting and an enlightening experience. Last summer with the special session to consider Medicaid and this year with the regular session in full swing, it seems almost as if the Legislature has been meeting continually. And, hardly does one crisis begin to pass before another more serious one appears.

Many issues of great importance to the practice of medicine in Mississippi have been before these two sessions of the Legislature. While we are fortunate to have many good and staunch friends in the Legislature, it is realistic to recognize that organized medicine is increasingly under attack.

Much of the hostile feelings which we have on occasions experienced can be explained by lack of proper communication with the Legislature. In our busy days, we simply have not taken the time or made the effort to communicate on a personal basis with our legislators so that they may more properly understand our points of view. We must organize ourselves so that our members will be more adequately informed on issues under consideration and bring our membership to an understanding of the absolute importance of participating from a position of knowledge in the great debate on delivery of health care that looms on the horizon. We must increasingly and individually become involved with our lawmakers, helping them draft legislation that will serve the best, long-range interest of the public and preserve the free enterprise system that has made American medicine the greatest in the world.

★★★



Professional Corporations: They're Here!

I

TEN MONTHS to the day after adoption of Resolution No. 6 by the association's House of Delegates in 1969, professional corporations for Mississippi physicians are a legal reality. On March 16, the first citizen of the state guided his pen across the engrossed copy of House Bill 48, affixing the familiar signature, "John Bell Williams," as the president of the association stood at his side. We not only have a professional corporation law, but we have an unusually good one.

The West Mississippi Medical Society, consisting mostly of Vicksburg physicians, introduced Resolution No. 6 at the 101st Annual Session, seeking association approval and endorsement of professional corporations and asking that a suitable bill be prepared and introduced in the Legislature to make these legal entities possible. The MSMA team took it from there, and our bill was introduced by Hon. Fred Lotterhos of Jackson, a member of the House of Representatives and respected practicing attorney. Much work was done on the bill in the House Committee on the Judiciary, and physicians owe a debt of gratitude to Hon. H. L. Merideth of Greenville, the committee chairman, who conducted hearings, investigations, and sessions of the committee not only to secure passage of the measure but to

strengthen it as well. The bill passed the Senate without change.

Not every Mississippi physician will find it advantageous to incorporate, nor will it even be economical to some. But for many, there are tax benefits aplenty over anything else available. In fact, physicians are almost equal—but not quite—to their business and industrial counterparts before the awesome majesty of the Internal Revenue Service. And it's about time, too.

II

The state medical association's bill amends Section 5390-42 of the Mississippi Code of 1942, Annotated, to define "professional service" as a personal service to the public which "requires as a condition precedent to the rendering of such service the obtaining of a license or other legal authorization and which prior to the passage of this act and by reason of law could not be performed by a corporation."

Any corporation formed under the act will exist for the sole and specific purpose of rendering professional services. Its shareholders are restricted to individuals "who themselves are duly licensed or otherwise legally authorized within the state to render the same professional service as the corporation."

The enactment also amends Section 5390-43 to define who may organize a professional corporation. In response to an amendment to Resolution No. 6 on the floor of the House last year, the law permits a single or solo practitioner to incorporate, as well as two or more. But most important of all, professional corporations enjoy the same privileges and benefits as are permitted under the Mississippi Business Corporation Act, except for the limitation of corporate activities or the practice of the profession. This was another substantial service performed for the profession by Chairman Merideth and his colleagues of the House Committee on the Judiciary.

III

Since enactment of the federal income tax in the era of World War I, self-employed professional individuals have been behind the tax collector's eight ball. In the decade of the 1950's, medicine opposed compulsory Social Security coverage for physicians. This also meant opposing professional corporations, because the Social Security Act required this taxation upon every corporate employee. Rather, American medicine went for Keogh and voluntary tax-deferred retirement programs for the self-employed.

We got Keogh, and there is something in it for just about every self-employed professional individual, generally, much more for some than for others. It is a good, sound law which is not subject to the whims of judicial fiat in tax litigation. But for most, it is half a loaf: A self-employed individual can't even deduct his personal hospital insurance premium under it.

The professional corporation opened up new vistas, and the issue of mandatory coverage for physicians became academic and rhetorical in 1965 with the enactment of Public Law 89-97, Medicare and Medicaid, which also blanketed the M.D. into Social Security. The long road through the courts for the professional corporation, blocked at every turn by the Treasury Department and Internal Revenue Service, is a familiar story to physicians. In 1969, the Treasury Department, with a zero record in the courts, announced that no further litigation would be pursued against professional corporations. The way was apparently clear for the Mississippi action as mandated in Resolution No. 6.

IV

House Bill 48 is far more than a vehicle for tax-sheltered retirement plans, but this is the

principal benefit. The corporation may cover its employees (and owner-employees) with one or more deferred compensation plans qualified under Section 401(a) of the Internal Revenue Code of 1954, deducting from federal taxes all contributions to such plans.

Moreover, beneficiaries are deemed to have received no taxable income until payment of benefits. A plan may provide for progressive vestment, and amount so owned may be enjoyed by the beneficiary-owner at any time with payment only of income tax due. Under Keogh, this is not possible.

The corporation may purchase group life, accident, and health insurance for its employees, deducting from taxes all premiums paid. Most such plans are noncontributory, meaning that the corporation pays the full amount. For federal tax purposes, professional corporations may pay death benefits of as much as \$5,000 which are not only fully deductible for tax purposes but which are also not taxable to recipients.

Corporations may establish a plan for sick leave payment for employees, usually at full salary, and deduct all such costs from taxes. Employees receiving such benefits may deduct from personal income taxes up to \$100 per week of benefit payments. Corporate employees are fully covered by Workmen's Compensation, and the costs of the coverage are tax-deductible to the corporation with tax-free benefits to employees. A corporate employee may even exclude from gross income meals, lodging, and travel expense furnished by the corporation under certain circumstances.

V

But a note of caution: Proceed with the same care which is required in any serious and substantial business transaction. In the next few months, Mississippi physicians will be deluged with mail and hordes of salesmen, investment counselors, insurance agents, mutual fund representatives, pitchmen of every degree and shade, and perhaps an occasional bank vice president. They are after just one thing: Your corporate funds in their own particular type of investment.

Most of these salesmen will have lawful and sound programs to offer. Their main selling point will be relief of detail and administration for the busy physician. Some few will have plainly poor programs to sell, and dealing with them would be a tragic mistake.

For the physician or medical group feeling that the professional corporation offers the most and best advantages, call in the certified public

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accountant who regularly examines accounts and counsels on taxation. Consultation with an attorney is also time well spent. Look critically into your individual tax situation and practice organization. Some are going to find that the Keogh route is as good as the corporation without the attendant costs and detail. Others—many, we trust—will find substantial advantage in the corporate vehicle.

But whatever the case, begin with competent and preferably independent professional evaluation and screening before making a decision. Be certain that corporations conform to the IRS regulations of 1965 which were aimed at and against professional corporations: Your organization must have more corporate characteristics than those of a partnership or trust to qualify. IRS still denies tax benefits to some professional corporations on this basis.

Be certain also to look over all plans available, because one may be best for a given tax and practice situation. Deal with reputable, established institutions and organizations in the corporate finance market.

The association has carried this assignment from the membership to completion, another team project which has paid off. The association will now devote its efforts toward the interests of those who elect to use this vehicle.—R.B.K.

Complete Care of the Whole Man

"I don't want any preacher around upsetting my patients."

This remark is attributed to one Dr. Orville S. Walters writing in the *Illinois Medical Journal* quite a few years ago. Now his state medical society, along with all of its sister associations and societies, has a useful, viable program in medicine and religion.

The Mississippi State Medical Association pioneered this program, presenting what was probably the first state symposium on medicine and religion in 1963. The AMA program has prospered under the skillful leadership of the Rev. Dr. Paul B. McCleave and the 20-member Committee on Medicine and Religion.

Mississippi is proud that one of the 10 representatives of the clergy and rabbinate is the Most Rev. Joseph B. Brunini, bishop of the Diocese of Natchez-Jackson which embraces our state. Bishop Brunini has given valuable leadership and sup-

port to this AMA program, having been first appointed to serve as one of two Catholic representatives with the popular and distinguished Bishop Fulton J. Sheen.

The seven-member Committee on Medicine and Religion of the association is a constitutional body of the Board of Trustees. Its program is expanding as it reaches into our communities and major medical institutions. Component societies of the association have associated themselves in the work of treating the whole man and promoting closer understanding between physicians and clergymen and rabbis. Only recently, a major presentation was sponsored by the Central Medical Society at Jackson with state committee support and participation.

This is a program which may be implemented in a community with only one physician and one minister. And how much more is it needed in the larger communities with many physicians and churchmen. AMA will supply materials, and the state association committee stands ready to offer suggestions and guidance.

What was once a conflict between the physician and the man of the cloth, so well illustrated by Dr. Walters' observation, is fast becoming a useful partnership serving the needs and well-being of the patient. It has been wisely observed that a man may be without a denomination but he is not without a faith. Let us give more than the miracles of science in the care of the whole man and lend our support and conscientious effort to this vital program.—R.B.K.

Malthus and Meat Analogs

Malthus was right, although it has taken us two centuries to find that out. At the rate we are going, the world's population will outstrip the food supply. Of course, human hunger and malnutrition are favorite vehicles for making political hay. It is fashionable to decry half the world's going to bed hungry or ill-fed.

This may soon come to mean half of suburbia, too, if you've been to the supermarket lately and looked at the food prices. There's no question about it: If the Big Board on Wall Street had the upswing record of cheese, meat, canned corn, and peanut butter, we'd have a society of wealthy shareholders.

But everywhere on the horizon are evidences of American ingenuity, and there's hope in the



supermarket yet. The most recent development is meatless meat, and it has medical, social, and economic implications.

Just about everybody knows how good General Mills' BacOs® can be on the salad or scrambled eggs. This synthetic product, tasting devilishly close to \$1.10 per pound bacon, is among the first of the successful meat analogs, so named as being "analogous" to meat.

But joy for Mississippi, meat analogs are made mostly from soybeans. They are nutritious, tasty, and much less expensive than meat. In northern test markets, there are *ersatz* meat loaf, luncheon slices, meatless meat pies, hamburger(less) patties, and even "Stripples," a Worthington bacon-like strip which for 79 cents yields up about the same number of servings as two pounds of bacon.

The process involves "spinning" soybean fiber and then shaping and flavoring it like meat. There are fat and flavor fillers, colorings, and slicing. Many claim that it is just another impulse item, but in industrial cafeteria tests, workers ate analogs with relish, and most didn't complain after being told that the meat was meatless. Now, Swift and Co. is about to introduce a revolutionary extrusion process which may open the market up wide.

Does this portend ill for the livestock industry? Absolutely not, because meat-hungry Americans will continue to clamor for U. S. prime ribeye steaks. But it is no secret that the price is going out of sight, because protein for cattle is costly in feeds and grazing. Above all, there will be progressively more people to eat a diminishing supply of food.

Analogues will get progressively better, as techniques improve. One meat processor has a steak which is hardly distinguishable from the real McCoy in appearance and feel. It is a little mushy in comparison with the best grade of beef, but it is also about a third of the price.

So far, nobody has come up with a causal connection between the components of analogs and cancer, mental retardation, or crossed eyes. The nutritive values appear to be well-established, and the economic possibilities suggest that meat, in analog form, may soon be back on low income tables. All of this is to say that we may continue to feed ourselves in spite of runaway procreativity.—R.B.K.

April 1-3, 1970

SEVENTEENTH ANNUAL CARDIOVASCULAR SEMINAR

University Medical Center, Jackson
April 1, 2, 3, 1970, beginning at 8:30 a.m.

Sponsored by the Mississippi Heart Association
and The University of Mississippi School of
Medicine

Participants:

Jack W. Fleming, M.D., cardiologist, and director, Project Coronary Care, Medical Center Clinic, Pensacola, Florida

Noble O. Fowler, M.D., professor of medicine, The University of Cincinnati College of Medicine and director, Cardiac Research Laboratory, Cincinnati General Hospital, Cincinnati, Ohio

John A. Chadbourn, M.D., assistant professor of clinical medicine and co-director, Mobile Coronary Care Unit, New York University-Bellevue Medical Center, New York, N. Y.

Lawrence E. Lamb, M.D., professor of medicine, Baylor University College of Medicine, Houston, Texas



"The sponge count is correct, Doctor, but my lucky rabbit's foot is missing!"

Derward Lepley, Jr., M.D., professor of thoracic-cardiovascular surgery and chairman of the department, Marquette University School of Medicine, Milwaukee, Wisconsin
 Madison S. Spach, M.D., chief of the division of pediatric cardiology, department of pediatrics, Duke University School of Medicine, Durham, North Carolina

Wednesday Morning

EXPERIENCES IN MASS SCREENING ELECTRO-CARDIOGRAPHY
 Dr. Lamb

MOBILE CORONARY CARE AMBULANCING
 Dr. Chadbourn

INTRACARDIAC SHUNTING MECHANISMS AND THEIR INFLUENCE ON VENTRICULAR PERFORMANCE IN CONGENITAL HEART DISEASE
 Dr. Spach

PEDIATRIC GRAND ROUNDS

Wednesday Afternoon

INTERMEDIATE CORONARY CARE UNITS
 Dr. Chadbourn

MOBILIZING COMMUNITY RESOURCES FOR CORONARY CARE
 Dr. Fleming

VALVULAR REPLACEMENT
 Dr. Lepley

DISCUSSION

Thursday Morning

THE CURRENT ROLE OF ISOPOTENTIAL SURFACE MAPPING IN CLINICAL ELECTROCARDIOGRAPHY
 Dr. Spach

MYOCARDIAL DISEASE
 Dr. Fowler

CORONARY SURGERY: DIRECT RECONSTRUCTION
 Dr. Lepley

SURGERY GRAND ROUNDS

Thursday Afternoon

PERICARDIAL DISEASE
 Dr. Fowler

EXERCISE AND THE CARDIOVASCULAR SYSTEM
 Dr. Lamb

CURRENT MAJOR DIAGNOSTIC AND THERAPEUTIC PROBLEMS IN CHILDREN WITH HEART DISEASE
 Dr. Spach

DISCUSSION

Friday Morning

THE FAILING HEART IN ACQUIRED HEART DISEASE
 Dr. Lepley

CLINICAL PALPATION AND PORTABLE RECORDING IN EVALUATING COMMON CARDIAC PROBLEMS
 Dr. Fleming

MODERN TREATMENT OF PAROXYSMAL ARRHYTHMIAS
 Dr. Fowler

MEDICINE GRAND ROUNDS

CARDIOVASCULAR STUDIES IN ASTRONAUTS, AIRCREWS AND ATHLETES
 Dr. Lamb

CIRCUIT COURSES

EASTERN CIRCUIT

MERIDIAN—April 7—Session 2; May 5—Session 3, East Mississippi State Hospital, 6:30 p.m.; Briarwood Country Club, 6:30 p.m.

COLUMBUS—April 28—Session 3, Downtown-er Motor Inn, 6:30 p.m.

Session 2—Respiratory Failure: Current Methods of Management, Dr. Boyd Shaw

Surgical Management of Emphysema, Dr. William Fain

Session 3—Complications Associated With Saddle Block Anesthesia in Obstetrics, Dr. Donald Sherline

The Management of Edema Related to the Kidney, Dr. Ben B. Johnson

SOUTHWEST CIRCUIT

McCOMB—April 7—Session 3, Southwest Mississippi General Hospital, 7:00 p.m.

NATCHEZ—April 21—Session 3, Jefferson Davis Memorial Hospital, 7:00 p.m.

Session 3—Headache Neurological Approach, Dr. Armin Haerer

Neurosurgical Approach, Dr. Robert R. Smith

FUTURE CALENDAR

March 16-20, 1970

CARDIOLOGY INTENSIVE COURSE

STROKE INTENSIVE COURSE

POSTGRADUATE / Continued

April 1-3

CARDIOVASCULAR SEMINAR

April 7

CIRCUIT COURSE, McCOMB

CIRCUIT COURSE, MERIDIAN

April 16

MISSISSIPPI THORACIC SOCIETY

April 21

CIRCUIT COURSE, NATCHEZ

April 28

CIRCUIT COURSE, COLUMBUS

May 5

CIRCUIT COURSE, MERIDIAN

May 11-14

MISSISSIPPI STATE MEDICAL ASSOCIATION



PERSONALS

WILLIAM E. BOBO of Clarksdale has conducted cardiopulmonary resuscitation training sessions for physicians from the Greenwood Leflore Hospital, King's Daughters Hospital of Greenville, General Hospital of Greenville, and the East Bolivar Hospital of Cleveland, at the General Hospital in Greenville.

TOMMY BROOKS of Jackson was among gem cutters and collectors who exhibited their gems at the 11th annual Mississippi Gem and Mineral Society show in February. Dr. Brooks is a past president of the society.

ROBERT S. CALDWELL of Tupelo and JOHN M. McRAE of Laurel have been appointed to the Boards of Directors for the University of Mississippi Alumni Association and the Medical Alumni Chapter.

CHARLES N. CANNON has begun the general practice of medicine and surgery at Philadelphia. Dr. Cannon's offices are located at 587 E. Main.

JAMES DOSTER of Columbus has been named a new director of the 1970-71 Columbus-Lowndes Community Fund.

WILLIAM M. FLOWERS of Jackson spoke on radioisotopes and scanning to the medical staff of

Southwest General Hospital at McComb. The hospital is considering installing radioisotope nuclear equipment in the x-ray department.

WILLIAM A. GARY has associated with R. B. ROBINSON of Saltillo in the practice of general medicine at the Saltillo Clinic.

GUY T. GILLESPIE, JR. of Jackson announces the removal of his office for the practice of hematology and chemotherapy to 710 Gillespie Street in Jackson.

WILLIAM E. GODFREY, III; THOMAS L. PURVIS, JR.; DONALD E. KILLELEA; and LOUIS C. LEHMANN, of Natchez have announced the removal of their offices to 136 Jefferson Davis Boulevard.

CARL R. HALE of Hattiesburg has been appointed stockholder representative for Forrest County of Kimbrough Investment Co., Jackson, owners and operators of the Sheraton-Biloxi.

Gov. John Bell Williams has appointed the following physicians to a 40-member committee to study the problems of children and young people in preparation for the 1970 White House conference: WILLIAM E. LOTTERHOS, ROBERT E. CARTER, NOEL C. WOMACK, JR., CLAUDE G. SUTHERLAND, MARY ALICE LEE, HUGH COT-



"But, how could I be?—He never once missed taking his pill."

IRELL, and FRANK WIYGUL, all of Jackson. Drs. Lotterhos and Carter were appointed co-chairmen of the committee.

L. L. McDUGAL of Tupelo was awarded the Outstanding Citizen Award posthumously during the city's annual Junior Auxiliary Charity Ball.

C. B. MITCHELL of Starkville has presented 27 shares of IBM stock to the Mississippi State University Development Foundation to be restricted to the C. B. Mitchell Pre-Med Fund. The gift qualifies Dr. Mitchell, retired university physician, as a member of the Patrons of Excellence program.

A. C. PICKLE of Kosciusko instructed physicians at Tyler-Holmes Hospital of Winona in the techniques of cardiopulmonary resuscitation at a Mississippi Heart Association-sponsored training course.

ERNEST P. REEVES of Collins has been elected director of First Guaranty Savings and Loan Association. Formerly advisory director, Dr. Reeves was elected to full directorship at the annual board meeting.

T. E. Ross, III of Hattiesburg recently presented a workshop on cardiac resuscitation at the South Mississippi Medical Auxiliary meeting in Hattiesburg.

E. J. SCHMIDT of Bude has been named citizen of the year at a banquet at Franklin County's Middlefork Country Club.

C. D. TAYLOR, JR. of Pass Christian served as president of the St. Paul's Mercy Carnival Association which sponsored the annual Mardi Gras parade.



NEW MEMBERS

The following physicians have been elected to membership by their respective component Medical Societies in the Mississippi State Medical Association and the American Medical Association.

MILLER, RICHARD CHARLES, Jackson. Born Hartford, Conn., Nov. 6, 1929; M.D., Harvard Medical School, Boston, Mass., 1955; interned University Hospitals of Cleveland, Ohio, one year; surgery residency, same, July 1, 1956-June 30, 1957, and July 1, 1959-June 30, 1962; fellowship in pediatric surgery, Royal Children's Hospital, Melbourne, Australia, 1963-64; elected Jan. 6, 1970 by Central Medical Society.

RESTER, ROBERT RAYMOND, Jackson. Born Jackson, Miss., Oct. 8, 1932; M.D., University of Mississippi School of Medicine, Jackson, 1968; interned same, one year; elected Nov. 4, 1969 by Central Medical Society.

SPECK, JAMES W., Ecu. Born Pontotoc, Miss., April 26, 1941; M.D., University of Mississippi School of Medicine, 1967; interned Mobile General Hospital, Ala., one year; elected Dec. 3, 1968 by Northeast Mississippi Medical Society.

SPRABERY, ARCHIE PATRICK, Fulton. Born Tupelo, Miss., Dec. 18, 1942; M.D., University of Mississippi School of Medicine, Jackson, 1967; interned Mississippi Baptist Hospital, Jackson, one year; elected Sept. 19, 1969 by Northeast Mississippi Medical Society.

WALDEN, THOMAS BEALL, Brookhaven. Born Georgetown, Miss., April 15, 1937; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned, same, one year; pathology residency, same, July 1, 1963-June 30, 1967; elected by South Central Mississippi Medical Society.

WHITE, ELLISON FRED, Houston. Born Brookhaven, Miss., April 7, 1916; M.D., University of Tennessee College of Medicine, Memphis, 1942; interned Baptist Memorial Hospital, Memphis, Tenn., one year; fellow in medicine, Mayo Foundation for Medical Education and Research, Mayo Clinic, 1943-1947; University of Minnesota Graduate School of Medicine, M.Sc. (Medicine) 1947; elected Dec. 3, 1968 by Northeast Mississippi Medical Society.



DEATHS

COOKE, JAMES KENNETH, Jackson. M.D., University of Tennessee College of Medicine, 1948; postgraduate training in psychiatry at Tulane University and child psychiatry at the University of Indiana; died Feb. 11, 1970, age 57.

PITCHFORD, RUTH DEAN, Canton. M.D., University of Virginia; died Feb. 24, 1970, age 71.

Pharmacy School Organizes Museum

Directions on the cough remedy bottle were printed in nine languages—from English to Norwegian, French to Yiddish—but something else was unique about the medicine . . . it only cost 34 cents.

Consequently, although a mere 40 years old, the “international” cough medicine has become a part of the University of Mississippi School of Pharmacy’s newly organized Pharmacy Museum.

Purpose of the museum, according to Pharmacy School Dean Charles W. Hartman, is to record history and illustrate progress in the profession in both theory and practice.



Examining antiques once used in an old Mississippi pharmacy, and now a part of the University of Mississippi School of Pharmacy’s Museum, are (from left) Jill Patrick of Tallapoosa, Ga. and James Scruggs of Atlanta, Ga. The museum is located in the School of Pharmacy’s new building at Ole Miss.

“The museum was unveiled last June when we moved into our new building,” he explained, “although we have been collecting items since 1961, when we began asking pharmacists in Mississippi for artifacts of historical interest.”

Dean Hartman said there are presently between 1,000 and 2,000 items in the collection but added that all are not yet on display.

To be featured in the museum when all display areas have been filled will be old drugs, prescription journals, pill tiles, antique weights and balances, grinding mills, apothecary jars, and even an old-fashioned marble-topped fountain table and chairs.

Representative among the dark bottles with faded labels is Professor Guilmitte’s French Kidney Pads “guaranteed to cure any person . . . who has lame back, gravel, diabetes, Bright’s disease of the kidneys, catarrh of the bladder, general weakness, dropsy.”

Or there is the remedy with the simple but highly appropriate name of “Pain Killer,” which could be swallowed or rubbed on, depending on one’s ailment. Internally, it solved problems of cramps, colic or colds; externally, it was dandy for insect stings, muscular strain, or minor injuries.

A special feature of the museum is a section devoted to the first dean of the Ole Miss School of Pharmacy, Henry Minor Fraser, for whom the building will be named in later formal ceremonies.

The section contains Dean Fraser’s citations, scrapbook, watch, and a letter to Gov. Lee Russell after graduation from a recognized school of pharmacy became a prerequisite for becoming a licensed pharmacist. Also in the collection is the pen with which the governor signed the law.

Although undedicated, the museum is already open to the public.

EEG Course Set for September

A continuation course on “Current Practice of Clinical Electroencephalography” will be held Sept. 14-16, 1970, in Washington, D. C. The course is designed to review the principal applications of the EEG to clinical medical practice, and is sponsored by the American Electroencephalographic Society.

Inquiries about further details of the course or registration procedure should be addressed to Dr. Donald W. Klass, EEG Course Director, Mayo Clinic, Rochester, Minn. 55901.



Book Reviews

Manual on Artificial Organs. Vol. I, The Artificial Kidney. By Yukihiro Nose, M.D., Ph.D. 343 pages with illustrations. St. Louis: The C. V. Mosby Company, 1969. \$27.75.

Few books have been written for the physician and his patient. This is one of those books. This stems from the fact that hemodialysis is a relatively new venture for both of these parties. For this reason, portions of the book seem fundamental at first glance, but these concepts are essential to the basic comprehension of the principles of dialysis. The interrelationship and interaction of man and a machine responsible for the maintenance of his life require this type of information. This book helps to bring this concept into sharp focus both for the physician and his patient.

The book is well written using many excellent detailed illustrations. It covers the broad field of dialysis ranging from the history of dialysis to future planning and optimal design of community kidney care centers. It also contains detailed description on the technique of peritoneal dialysis. This is probably the best analysis of this topic to date for medical and paramedical personnel. The author gives an accurate appraisal of existing dialysis equipment. In addition, he discusses the future of dialysis equipment including the possibility, and feasibility of wearable and implantable artificial kidneys. The largest portion of the book is directed toward the major problems in dialysis today. Considerable time is spent on the care and maintenance of permanent access to the human blood stream. The newer internal A-V fistula is described and evaluated very well. The medical complications of long term chronic hemodialysis are also presented along with the current state of the art toward prevention of these complications.

The book has an excellent index and contains many pertinent references that will permit the reader to delve as deeply as desired into dialysis technology, clinical results and research related to this field.

This book definitely has a place in the office of any physician involved in any form of dialysis. It will make a good teaching text for patients, physicians, nurses and technicians in the home and satellite hemodialysis programs of Mississippi.

JOHN D. BOWER, M.D.

Current Practices in Orthopaedic Surgery. Edited by John P. Adams, B.S., M.D., F.A.C.S. 279 pages with 322 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$22.50.

This fourth volume of *Current Practice in Orthopaedic Surgery* is edited by John P. Adams, M.D. This and previous volumes have been an annual review of current practices in orthopaedic surgery with each article being an interpretation of the literature, explained and when necessary enlarged upon, according to the concepts of well qualified authorities.

The nine contributors of this volume have not only interpreted the literature on their respective subjects but also advanced their own thoughts on the matter.

The topics covered in this edition help to clarify "current practices" in several important areas of orthopaedic surgery. It consists of 279 pages and 322 illustrations. There are three primary sections. The first section is an interesting and enlightening history of American orthopaedic surgery by Dr. Alfred R. Shands. Section two covers general orthopaedic surgery and includes congenital talipes equinovarus, femoral intertrochanteric osteotomy for arthritis of the hip, fractures and dislocations of the cervical spine (diagnosis and treatment), and flexion deformities of the fingers.

Section three is a miscellaneous section and includes current aspects of shock management, regional anesthesia in the upper limbs, and manual muscle testing of the trunk and lower extremities.

While the volume does not serve as a complete text, it certainly has a good deal to offer as a reference to those topics mentioned above. I feel that it is a worthwhile addition to my library.

WILLIAM B. THOMPSON, M.D.

HOUSE OF DELEGATES / Continued

The Report of the Committee on Planning and Development for AMA (Himler Report) was received formally by the House of Delegates. Instead of generating the anticipated controversy, the report was discussed and handled with little fanfare. The House established an *ad hoc* committee to receive the report, to recommend methodology for a permanent committee, and to send the report to state associations requesting resolutions for consideration at the 1970 annual convention.

After years of discussion and debate, the House of Delegates adopted as policy that "cannabis (marijuana) is a dangerous drug and as such is a public health concern. It is a psychoactive substance which can have a marked deleterious effect on individual performance and social productivity. A significant number of exposed persons become chronic users with concomitant medical and interpersonal problems."

The House stated that the sale of marijuana should not be legalized, saying that if potency were legally controlled, predictably there would be an illicit market for the more powerful forms.

The AMA-ERF Institute for Biomedical Research, called a noble experiment, was discontinued because of high costs. The House could find no way to construct a permanent building for the Institute, and there were no outside funds available to assist AMA in supporting the multi-million dollar activity.

The House created a Committee on Private Practice, assigning it to the Council on Medical Service. A proposal to establish a new Council on Private Practice was not favorably considered. Support for the Regional Medical Programs under PL 89-239 was reaffirmed, but the delegates opposed on-site auditing of physicians' accounts in their offices by government representatives. Federal licensure was opposed, but state associations were urged to work with legislatures to strengthen licensure laws. Physicians were asked again to be mindful of care costs, as concern was expressed over the ever-increasing costs of hospital care. The Mediredit concept for voluntary national health insurance was endorsed.

State medical associations were encouraged to make active membership available to residents and interns (a benefit available in Mississippi), and dialogue with medical students was recommended.

Expression of Delegates. Your AMA Delegates express their appreciation to our own House of Delegates, to the Board of Trustees, and to the

general officers for support and the maintenance of continuing communication. We sit with the Board at all meetings and are thereby enabled to be fully informed on all policy developments and positions. We pledge our best effort in representing your wishes, desires, and policies in the AMA House of Delegates.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

101st Annual Session. At the 1969 annual session, the House of Delegates approved two amendments to the By-Laws of the association, both with reference to committees.

Section 2, Chapter IX, was amended to accord constitutional status to the Committee on Blood and Blood Banking as a permanent committee of the Council on Medical Service. This action did not, however, confer a vote in the House of Delegates on the committee members, since only elected officers, Trustees, and council members have the vote.

Section 2, Chapter VI, was repealed as regards a new nominating procedure instituted in 1968. The traditional method of making nominations was restored and will be followed during the present annual session.

Two proposed amendments to the By-Laws at the 1969 annual session failed. One was to make the Speaker and Vice Speaker of the House of Delegates *ex officio* members of the Board of Trustees without vote and the other would have empowered the Speaker and Vice Speaker to appoint reference committees.

102nd Annual Session. There are no pending amendments to the Constitution or By-Laws lying on the table. The council will stand in readiness to consider any amendments which are proposed at the present annual session.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Organization and Duties. The Council on Scientific Assembly is a constitutional body of the House of Delegates, charged with the responsibility of planning the annual session of the association to include all scientific activities, the programming, and the scheduling of the annual session events. The council membership consists of the chairmen and secretaries of the seven scientific sections and the secretary-treasurer, a total of 15 members.

102nd Annual Session. Your council began plans for the 102nd Annual Session in August 1969. The general format, previously approved by the House of Delegates, has been con-

inued with general sessions centering around broad areas of specialty interests. To the maximum possible extent, conflicts in programming have been eliminated. The council, in many instances, has requested and placed essayists before sections from the various specialty societies not represented in the Scientific Assembly. The membership is thereby given the benefit of the presence of these speakers which might not otherwise be available. The specialty societies continue to work closely in these and other connections to improve the quality and to enhance the attractiveness of our programs.

At the present annual session, about 12 specialty groups, four medical alumni groups, and various nonscientific but medically related bodies will meet concurrently during May 11-14. We believe that this arrangement offers variety and combinations of benefits for the membership in attendance.

We have scheduled film programs again immediately before each scientific section. We are gratified with the promising quality and interest of our scientific exhibits, and we urge each member and guest in attendance to avail themselves of the benefits of the Technical Exhibit which largely supports our annual session's scientific work.

Expression of the Council. Your Council on Scientific Assembly is deeply grateful for the support, cooperation, and assistance we have received in planning the 102nd Annual Session. We are especially aware of the problems confronting our headquarters hotel complex resulting from the devastating experience of Hurricane Camille. The Buena Vista organization has done splendidly in restoring services and facilities to fulfill our contract, and we will look forward to future annual sessions scheduled for our Gulf Coast.

REPORT OF THE JUDICIAL COUNCIL

Constitutional Responsibilities. Your Judicial Council is one of eight elected councils of the association and one of the three which reports directly to the House of Delegates. Under authorities contained in Section 4, Chapter IX, of the By-Laws, the council is charged with the exercise of the judicial powers of the association and the interpretation and application of the *Principles of Medical Ethics of the American Medical Association*. The rulings of the council are subject to the will of the House of Delegates, and its judicial decisions may be appealed to the Judicial Council of the American Medical Association.

In the exercise of these powers and discharge of its responsibilities, the council endeavors to work with general officers, the Board of Trustees, and component medical societies. At all times, the council endeavors to be responsive to the needs and requests of members of the association.

Medical Ethics. At the 101st Annual Session in 1969, your council reported seven opinions to the House of Delegates relating to telephone directory listings, compulsory assessments upon hospital staff members, transplantation of human tissue, drugs and devices, treatment of obesity (condemnation of the so-called "rainbow pill" regimen), laboratory services, and use of bank credit cards for payment of physicians' fees. Your council reaffirms these opinions.

Two physicians who are members of the association asked the council during the 1969-70 association year to examine into a circumstance in which it was charged that a third physician, also a member who practiced in the same medical community, occupied offices in a community (Hill-Burton) hospital. The council, acting through the chairman, requested the component medical society to investigate the charge to determine if sufficient basis existed for formal action.

A committee of the component society, including the district Trustee, conducted the investigation and found that the office in question was merely in close proximity to the hospital with a walkway. The society expressed the opinion that no violation of law, regulations, or medical ethics had occurred, and the council has considered the matter closed. The Board of Trustees also received a report in this connection through the Trustee, also at the request of the council.

The council, acting on prior policies of the association, issues the following opinion:

Physicians should not maintain offices for the conduct of their regular private practice for care of outpatients in community, county, nonprofit, or church-affiliated hospitals. Exceptions are made in the case of those physicians whose practice of medicine is usually conducted in the hospital environment such as pathologists and radiologists. The proscription does not apply to the private proprietary hospital or to physician-owners when the medical staff approves the practice.

Discipline. The council has conducted no formal proceedings as to disciplinary matters either by original jurisdiction or on appeal during the association year. We stand ready, however, to respond to any need where and when necessary.

AMA Judicial Council. All opinions and de-

HOUSE OF DELEGATES / Continued

cisions of the AMA Judicial Council are regularly reviewed, and each member of your council maintains a compendium of these opinions and decisions which are secured and distributed through our association's executive office.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

Organization and Duties. The Council on Medical Service is a constitutional body of the House of Delegates. It is charged with the responsibility of ascertaining and studying all aspects of medical care in Mississippi. Under the council's jurisdiction are assigned activities of the association in medical service, emergency service programs, medical care for the indigent, and the work of allied medical agencies. The council is assisted in its work by four constitutional and three *ad hoc* committees. Programs, studies, and activities of the several committees embraced a wide range of subject areas and policy development and implementation during the 1969-70 association year.

Committee on Maternal and Child Care. The committee continues to pursue its study of maternal deaths in Mississippi, and during the year, it marked a full decade of these studies. The data have been processed on the association System/360 computer, and selected papers from the studies have been published in the JOURNAL. At the 101st Annual Session, the committee presented a scientific exhibit on its work.

Of particular interest is a recent substudy of anesthesia-related deaths in the series, and this is being presented in the Scientific Assembly at your 102nd Annual Session. The committee works closely with the Department of Obstetrics and Gynecology of the University Medical Center.

The committee continues to make available sets of "Maternal Health Desk Cards" which are distributed to hospitals through chiefs-of-staff and chiefs of ob-gyn services. The committee conducts regular quarterly meetings to pursue its duties and review case studies. The chairman is Dr. William B. Wiener of Jackson, and the committee has seven members and three consultants in medicine, pathology, and anesthesiology.

Committee on Mental Health. Continuing its work in broad areas of mental health, the committee has been acutely aware of problems in drug addiction. During the year, it has conducted educational activities in this connection and made materials available to physicians who have addressed school, youth, and other nonmedical audiences on the subject.

The committee reports that seven of the nine multi-county regions in Mississippi now have mental health centers or are preparing to become operational in the near future. Centers are already open at Tupelo, the first in the state, and at Oxford. Units for Jackson and Greenville are under construction, and plans are in advanced stages for centers at Meridian, Clarksdale, and Gulfport. The program has grants totaling \$3.7 million.

The chairman is Dr. John J. Head of Whitefield, and the committee has seven members.

Committee on Occupational Health. The committee, charged with study of all aspects of occupational health, continues to pursue an interest of a suitable and adequate legal base for Workmen's Compensation in Mississippi. The 1968 amendments covered occupational disease. Additional measures were pending before the 1970 Regular Session at the time of preparation of this report.

The committee continues to have interest in publishing papers in this area of interest in the JOURNAL.

The chairman is Dr. George D. Purvis of Jackson, and the committee has seven members.

Committee on Blood and Blood Banking. This committee was accorded constitutional status by the House of Delegates at the 101st Annual Session in 1969. It has been active in conducting Congressional liaison in connection with National Blood Donors Week and in the issue of a commemorative postage stamp on blood donors in a cooperative effort to focus attention on this acute need.

The committee has further pursued studies on computer-based blood bank inventory information systems and intends to institute, at the earliest practicable time, a pilot project making use of the association's computer. Modest financing will be required, and the possibilities of securing this from participating medical institutions will be explored prior to requesting support funds. The committee has also considered the possibility of a grant application for a demonstration project. When and if such a decision is reached, the matter will be subject to the usual approval procedures traditionally followed.

The chairman is Dr. Kenneth M. Heard of Jackson, and the committee has seven members.

Committee on Nursing (ad hoc). The committee has been intensely devoted to the major issue of mandatory licensure for nurses in Mississippi during the year. At the 101st Annual Session, the House of Delegates received majority and minority reports from the reference committee considering this matter. Neither was approved

or rejected, and the matter was recommitted to our council by the House of Delegates.

The association was then confronted with a difficult dilemma: The 1970 Regular Session of the Legislature, before which the issue of mandatory licensure for nurses was to be brought, was to convene the first week of January 1970, and with great interests in patient care at stake, we had urgent need for policy clarification. Useful debate at the 101st Annual Session, valid opinion, and response from delegates were carefully noted by the committee and council. Your council re-assigned this matter to the committee which conducted meetings both with nurse organization representatives and those of the hospital association. Extensive deliberation in executive session was carried out.

The committee reported to your council which, in turn, conducted a special meeting for consideration of the issue. Taking note of the fact that nurses have mandatory licensure in 42 of the 51 United States jurisdictions and the fact that nine of 13 health service and health-related professions in Mississippi have mandatory licensure, the committee viewed the problem in the context of discussions before our House of Delegates in 1969. Two points were primary:

—Whether mandatory licensure would serve as an incentive for improvement in quality education toward the end of better bedside nursing.

—Whether mandatory licensure would exacerbate the already-critical shortage of nurses.

The committee and your council were deeply concerned over any threat to (1) medical assistants to physicians who might not qualify for licensure and (2) those employed in hospitals who, while not carrying responsibilities of a nurse in the literal sense, might be brought under the law and be unable to qualify.

Accordingly, the following policy position was recommended and approved by the council:

(1) The association supports mandatory licensure of nurses in principle, reserving the prerogative of making further changes and improvement (in the proposal), including the offering of amendments to any bill introduced, and further reserving to the Board of Trustees the prerogative of final approval of any bill presented.

(2) The Committee on Nursing be utilized in consultation and testimony before the Legislature (within the framework of policy established) because of the committee's familiarity and expertise in the matter.

The Board of Trustees considered the work of the committee and the recommendations of your council in December 1969 and approved the pol-

icy. The committee chairman appeared as our witness during hearings on the bill in the 1970 Regular Session. As this report is submitted, the proposal is still pending, and the association continues to pursue its goals within the policy framework established.

The chairman of the committee is Dr. Tom H. Mitchell of Vicksburg, and there are five members.

Health Insurance Benefits Advisory Committee (ad hoc). This committee continues to serve as the official medical advisory committee for operation of Medicare in Mississippi with official status before the Certifying Unit for inpatient facilities, an activity of the State Board of Health.

The committee conducts meetings with physicians experiencing problems under the program, the Part 1-B carrier, the Part 1-A intermediary, intermediaries representing extended care facilities, the Bureau of Health Insurance of the Social Security Administration, representatives of HEW, and providers of services. The committee is not encouraged over these conferences as to results of its work and recommendations, despite its sincere efforts and diligence.

An advisory panel of knowledgeable physicians was appointed to work in utilization review as regards hospitals and ECF's, primarily with reference to the Certifying Unit, our third *ad hoc* body.

The chairman of the committee is Dr. Mal S. Riddell, Jr., of Winona, and there are seven members.

Other Council Activities. Some small but encouraging progress is being made in placing practicing physicians as voting members of hospital governing boards, despite opposition to this by many hospitals. This useful and important means of liaison with the medical staff bears the endorsement of the Joint Commission on Accreditation of Hospitals, the American Medical Association, the American College of Surgeons and most major national specialty societies, our own state medical associations and most of our sister state medical associations.

We continue educational efforts and programs designed to upgrade emergency medical service. During the year, the helicopter demonstration project has shown great promise, as reported in the JOURNAL. Staffing of hospital emergency rooms with physicians has greatly extended these services, and we endorse the various approved postgraduate and continuing education programs for physicians, nurses, and other allied professional personnel in this area as being vital to improvement of emergency medical services.

HOUSE OF DELEGATES / Continued

There is a salutary trend in legislative development on standards for ambulance and driver standards.

We met prior to the implementation of Title XIX Medicaid with state officials of the Medicaid Commission, and we have carefully monitored program development. Oversight of program development remained a primary responsibility of the Board of Trustees during the year, because of the Extraordinary Session of the Legislature to shape the program. Your council, however, is prepared to assume oversight of the ongoing program when and if the Board and House of Delegates so direct, as was the case in Medicare.

The council expresses appreciation to its several committees, some of which are among the most active bodies of the association, and to our colleagues of the Board of Trustees who have worked closely with us, giving understanding support and guidance to our problems and programs. The council emphasizes to the House of Delegates that its area of responsibility and concern, the actual practice of medicine and delivery of care, must have support from all members and adequate staff in our Executive Office. We repledge our best efforts in carrying out our work.

REPORT OF THE BOARD OF TRUSTEES

Organization and Duties. The Board of Trustees is the executive and governing body of the association during vacation of the House of Delegates. It is additionally charged with the duties and responsibilities prescribed by law for directors of corporations. In the discharge of these duties, the Board shall have conducted six meetings since the 101st Annual Session. The Board met in May, September (having been forced to cancel a scheduled August meeting because of Hurricane Camille), December, and February. Meetings are scheduled for April and May. Altogether, these meetings included 10 meeting days, usually exclusive of travel time.

Seven officers sit with the Board of Trustees in all meetings. They are the president, president-elect, secretary-treasurer, speaker, vice speaker, and AMA delegates. The Board is assisted in its work by support of the executive staff. All 1969-70 meetings were conducted at our headquarters building at Jackson.

This annual report includes actions on matters referred to the Board by the House of Delegates and those items relating to management and policy functions which are among the Board's responsibilities.

Referrals from the House of Delegates. Matters referred to the Board of Trustees by the House of Delegates at the 101st Annual Session and actions by the House requiring Board action include:

(a) *Blue Cross Group.* The new hospital service contract available to the membership has been operational for a year. It provides for 100 days per confinement with a room allowance of \$20 per day and all ancillary services. The House of Delegates voted to have the Board ask the plan to pay benefits due 15 subscribers in an amount of about \$16,000 carved out under Medicare prior to concluding a nonduplication agreement and to refer the matter of the nonduplication agreement back to the Board for further study.

The Board acted on the mandate of the House on the payback, and the plan reports that this has been accomplished. The matter of the nonduplication agreement has become moot, since the new 122X contract contains a standard provision on this.

(b) *Resolution No. 2.* This resolution asks that the association "seek amendments to existing law to provide for more proper and adequate professional compensation" for autopsy. In approving the resolution, the House asked "that the Board of Trustees of the association work out a suitable fee schedule with the executive committee of the Mississippi Association of Pathologists." At the time of preparation of this report, two bills to accomplish this are pending before the 1970 Regular Session of the Legislature.

One measure would increase the fee from \$75 to \$250. While we sponsor and support the bill, we have asked that the amendment provide for payment of the usual and customary fee rather than for a fixed amount. Prior to the convening of the Legislature, conference was conducted with the secretary of the Mississippi Association of Pathologists, and a formal letter in this connection was written inviting recommendations and suggestions.

(c) *Resolution No. 3.* This resolution expresses the belief of the association that "to replace physician-to-physician consultation with physician-to-industrial firm consultation (in the matter of laboratory services) would be unwise and not in keeping with good medical practices."

The resolution also asked that we communicate our concern over advertisements (for commercial or industrial laboratories) which appear in *Journal AMA* to the AMA House of Delegates. Drs. Nelson and Hicks introduced an appropriate resolution at the 118th Annual Convention of

AMA at New York. There were 10 similar resolutions also introduced.

The AMA House, however, adopted a substitute resolution and a report of the Judicial Council which, although reaffirming its historic position on the practice of pathology being the practice of medicine in every sense, took notice of the court decree in the matter of *United States of America v. American College of Pathologists*. Under this position, nonmedical laboratory advertising is not barred from *Journal AMA*.

The Board of Trustees invites the attention of the House of Delegates to the fact that nonmedical laboratory advertising is *not* accepted in our JOURNAL in the light of action at our 1969 annual session.

(d) *Resolution No. 4*. This resolution asks that the Mississippi Medical Political Action Committee prepare educational material concerning the coronership and supply physician-candidates suitable material coordination, and expertise and that MPAC study the counties of the state, encouraging physicians to seek this office.

The Board conferred with the chairman of MPAC and found that funds of the organization are extremely restricted. Moreover, these are the only funds which may lawfully be used in candidate support. The PAC is not a formal organization in the sense of being able to sustain service programs and studies. The Board, therefore, offered the best resources available in accomplishing this purpose, the pages of our JOURNAL, and asked the sponsor of the resolution to submit materials for publication in furtherance of the objectives which he sought in the resolution.

(e) *Resolution No. 6*. For the first time, in 1969 the House of Delegates approved the concept of professional corporations for physicians. This resolution called for our sponsoring an amendment to Mississippi law in this connection. An association-sponsored bill was introduced early in the Regular Session, and we testified three times in its support before the House Committee on the Judiciary. The measure passed the House of Representatives without a dissenting vote and is pending before the Senate Judiciary Committee "A" at the time of preparation of this report.

Nominations to State Board of Health. Following up on House actions in 1969, nominations were made to the Governor for appointment of three members of the Mississippi State Board of Health. These are:

For Public Health District 2: Drs. G. Lacey Biles, Sumner; Julian C. Bramlett, Oxford; and John R. Lovelace, Batesville.

For Public Health District 4: Drs. S. Lamar Bailey, Kosciusko; Thomas N. Braddock, West Point; and Lester D. Webb, Calhoun City.

For Public Health District 5: Drs. Lamar Arlington, Meridian; John R. Laird, Union; and Omar Simmons, Newton.

CHAMPUS. The association is in its 14th year as fiscal administrator for the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), the original military Medicare. With amendments to the law providing outpatient benefits and inclusion of retirees, the program has grown fourfold into a multimillion dollar operation. It remains unique in these respects:

—It is the only medical care program in Mississippi operated exclusively under physician control.

—It is the only medical care plan with a virtually unrestricted prescription drug program.

—It is unique in possessing a true usual and customary fee reimbursement system under medical peer control.

A five-member review committee meets 12 to 15 times annually on claims in question, and we are paying about 94 out of every 100 claims exactly as received. Our reorganized Department of Medical Care Plans in our offices makes payment weekly to physicians and others providing services.

JOURNAL MSMA. Our JOURNAL completed its first decade of service to the association with publication of the 120th consecutive monthly issue in December 1969. This largest single association-sponsored project is a team effort among the Editors, Committee on Publications, our printers, and executive staff. The Board expresses appreciation to the Editors and committee for their faithful and diligent services and pledges continued support to this vital membership service.

Legal Matter. At the 101st Annual Session, it was reported that the association and the Executive Secretary had been named defendants in the matter styled *J. P. Culpepper, Jr., v. American Medical Association*. Also named as defendants were the South Mississippi Medical Society and two officers. AMA dues in transit through the Mississippi State Medical Association in the amount of about \$31,000 were attached by the plaintiff.

On June 9, the Executive Secretary answered subpoenas for the association and himself in the company of our legal counsel in Chancery Court for Forrest County, when a continuance was ordered.

HOUSE OF DELEGATES / Continued

On July 8, the Chancellor, having accepted a compromise which was also accepted by the plaintiff, dismissed the suit with full prejudice as Cause No. 26509 on motion by plaintiff. AMA dues funds in the hands of the "garnishee defendant," as the association was identified, were thereby released. Because of the nature of the court order, the matter is closed.

Insurance Programs. In addition to the Blue Cross hospital group, the association also sponsors general accident, disability, health, and life programs with the Continental Casualty Co. through Thomas Yates and Co. of Jackson, administrators, and a professional liability program through the St. Paul Companies.

(a) *Continental Programs.* The group life program, one of the most recently initiated, has been successful to the point that benefits have been increased by 20 per cent without change in premium. Where a member carries the previous maximum of \$40,000, he now has \$48,000 for the same premium. We have recently inaugurated a group ordinary life program which requires no medical examination.

Participation continues to be excellent in the disability income programs, catastrophic hospital expense program, and office overhead expense group. Approximately 40 per cent of the membership carry some 1,200 contracts in these programs. The administrator makes a full disclosure reporting to the Board of Trustees on all aspects of these programs. The association does not handle any premiums or benefit payments, nor does it realize any income from any insurance program. We take the position that any profits which might thereby accrue should be passed along to participating members in the form of lower premiums, increased benefits, or both.

(b) *St. Paul Program.* The association is in its 9th year with the St. Paul professional liability program in which about 600 members participate. We have enjoyed the lowest professional liability premium rate in the United States as a result of our carefully managed program and claims review counseling by the Board.

The professional liability crisis has become acute in many states with astronomical premiums ranging up to as much as \$20,000 per year for certain specialties. The Board urges that care and diligence in the securing of this coverage be exercised and that threatened or instituted litigation be brought before the Board by any member concerned. The frequency of suits has increased as have awards and settlements in Mississippi.

Appointments. Under the provisions of Section 1, Chapter VII, of the By-Laws, the appointive powers are vested in the President. During the 1969-70 association year, President Royals has made the following appointments, each of which has the endorsement of the Board of Trustees:

(a) *Alternate Delegate to AMA.* Following the death of Dr. B. B. O'Mara of Biloxi, his unexpired term as Alternate Delegate to AMA was filled by Dr. Joseph B. Rogers of Oxford, AMA Alternate Delegate-elect.

(b) *RMP Representative.* President Royals, upon assuming office, resigned as the association's member of the Regional Medical Program Advisory Council. He appointed as his successor Dr. C. D. Taylor, Jr., of Pass Christian, our immediate past chairman of the Board of Trustees.

(c) *Committee on Publications.* This committee consists of the three Editors and three who are appointed for terms of three years each by the Board of Trustees. To serve the unexpired term of the late Dr. B. B. O'Mara, President Royals appointed Dr. Frank L. Butler, Jr., of McComb.

(d) *Delta-HEW Project.* This program for a five-county area, since identified as the County Health Improvement Program (CHIP), is operated by a Committee of Nine consisting of representatives of the state medical association, the State Board of Health, the University Medical Center, the Mississippi Medical and Surgical Association, and consumer representatives. Dr. Temple Ainsworth of Jackson, who represented the association on the committee for two years, resigned, and President Royals appointed Dr. Lyne S. Gamble of Greenville as successor.

(e) *Hospital Manpower Study.* The Mississippi Hospital Association received an RMP grant with which to fund a manpower study. Dr. Warren N. Bell of Jackson was named to represent the association as a member of the advisory body to the project.

(f) *Section on Preventive Medicine.* When Dr. Frank K. Tatum of Tupelo retired from the practice of preventive medicine, he also resigned as secretary of the Section on Preventive Medicine of the Scientific Assembly. President Royals, after consultation with the section chairman, appointed Dr. Frank M. Wiygul, Jr., to serve the unexpired term as secretary of the section.

(g) *Medicaid Committee.* Upon invitation by the Mississippi Medicaid Commission, President Royals appointed a five-member Technical Advisory Committee on Physicians Services. Members are Drs. Joe S. Covington of Meridian (internal medicine), James D. Hardy of Jackson (gen-

eral and thoracic surgery), William J. Carr, Jr., of Gulfport (pediatrics), J. Leighton Pettis of Tupelo (ophthalmology), and Tom H. Mitchell of Vicksburg (general practice). The committee elected Dr. Covington chairman, and he serves as the association's representative on the commission's Advisory Council.

Organization of the Board. One new Trustee, Dr. James T. Thompson of Moss Point, District 9, was welcomed to the Board during 1969-70, bringing to a total six new Trustees named to the Board since 1967. Dr. Thompson succeeded Dr. C. D. Taylor, Jr., of Pass Christian who retired after 13 years service, the last of which he served as chairman.

Officers of the Board during 1969-70 are Drs. Mal S. Riddell, Jr., of Winona, chairman; J. T. Davis of Corinth, vice chairman; and William O. Barnett of Jackson, secretary.

SUPPLEMENTAL REPORT "A" OF THE BOARD OF TRUSTEES

Scheduling of Annual Sessions. The Constitution of the association provides for the annual session, and under the By-Laws, it must be conducted prior to the annual convention of AMA. Section 2, Article V, of the Constitution states that "the time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Board of Trustees shall have the power to fix or change either the time or the place or both. . . ."

Since 1966, three major policy changes on scheduling the annual session have been made by the House of Delegates. Until 1966, the annual session was scheduled on a year-to-year basis, and by custom and tradition, it was rotated between Jackson and Biloxi. Actually, these have long been the only two cities in the state with adequate facilities. Because of scheduling difficulties on the year-to-year basis, the House approved a four-year advance schedule, and the association contracted on an alternating basis for Jackson and Biloxi 1967-1970.

Site of Annual Session. As convention facilities in Jackson became less satisfactory and as the annual session grew in size and scope, it was noted that attendance on the Coast was increasing. At the same time, Coast hotel facilities were improving as major hotels in Jackson were closed.

At the 99th Annual Session in 1967, the House agreed that the 1968 meeting would be conducted at Jackson to fulfill then-existing contracts but that annual session thereafter would be conducted on the Gulf Coast "until such time as more adequate and suitable convention facilities are made available at Jackson." There is no im-

mediate prospect of improvement at Jackson, because the 300-room supermotel now under construction is incapable of accommodating the meeting.

Resolution No. 9. By tradition, the annual session has been convened during the second full week in May, thereby conflicting with Mother's Day and with municipal elections during years held. Resolution No. 9 resolves "that the Board of Trustees is empowered to alter the date of the annual session so as to avoid these conflicts and to make such changes as are necessary and possible in contracts with the headquarters hotel to accomplish this purpose."

In implementing the resolution, the Board was unable to alter the 1970 contract because of existing commitments by the hotel. We have, however, been able to make necessary changes for 1971 through 1973:

<i>Annual Session</i>	<i>Dates</i>
102nd	May 11-14, 1970
103rd	May 3- 6, 1971
104th	May 8-11, 1972
105th	Apr. 30-May 3, 1973

To maintain our four-year advance schedule, the Board of Trustees recommends that the 106th Annual Session be conducted May 6-9, 1974, at Biloxi.

SUPPLEMENTAL REPORT "B" OF THE BOARD OF TRUSTEES

Himler Report. In November 1965, the AMA House of Delegates authorized and approved a planning and development project through the Board of Trustees who appointed an *ad hoc* committee for this purpose. The committee reported that AMA planning:

- Could be made more effective.
- That it should not be separated from management.
- That its process should be tailored to fit AMA's unique situation.
- Should be a commitment of leadership.
- Efforts should be to enlighten problems for solution.

Recognition should be given to the fact that the AMA structure presents severe limitations.

A Committee on Planning and Development was appointed in 1968, chaired by Dr. George Himler of New York. The report, a lengthy document, was presented to the House of Delegates at Denver in 1969, and a minority report from Dr. John H. Budd of Ohio, a member of the committee, accompanied the majority report.

The Himler Report is a searching and thoughtful examination of medical care in the United States, its manner of delivery, financing, gov-

ernmental influence, medical facilities, manpower problems, allied professions, and the physician himself. It further touches on medical organization, health care consumers, and a host of related areas.

The report contains 18 groups of recommendations totaling 57 in number. The minority report contains 19 recommendations, each a modification or refutation of a corresponding recommendation in the majority report. As such, the minority report cannot stand alone as a substitute for the majority report.

As should be expected of any major study of this scope, challenge, depth, and candor dealing with critical and painfully difficult problems, the Himler Report has evoked controversy. As often as not, opposition has been based on single statements or groups of statements judged alone. Some appear to object to the entire document as to content, but many of the recommendations flow from existing AMA policy.

No attempt was made by the AMA House of Delegates to act with finality on the report at Denver, and indeed, they could not. The House voted to name a committee to receive the report, to study its content, and to refer it to the governing bodies of constituent state medical associations.

In the latter connection, the AMA House stated that it can better act on the recommendations "with the benefit of individual resolutions to be submitted by the component and constituent state associations or societies." Your Board of Trustees has reviewed the Himler Report and the minority report together with an analysis by our AMA Delegates, Drs. Nelson and Hicks. They request instructions on the wishes of the association, recognizing the magnitude of their tasks at the Chicago annual convention of AMA in June.

The Board of Trustees recognizes the importance of this report and the difficulties implicit in dealing with its recommendations. The Board voted unanimously to transmit the report to our House of Delegates and to publish it to the membership prior to our 102nd Annual Session, together with the minority report. The full text is appended to this supplemental report, and the Board hopes sincerely that every member of the association will study it carefully and make his wishes known.

President Royals has agreed to write every member of the association and to invite attention to this transmittal, asking for informed opinion and debate.

The Board of Trustees encourages component medical societies to generate resolutions and policy positions on the majority and minority reports herewith transmitted. We ask that individual members of the association appear at the reference committee hearing on this report and discuss their views. We ask these things toward the end of enabling our AMA Delegates to represent faithfully, accurately, and forcefully the thinking of the association on this vital matter.

In making this transmittal, the Board also records the fact that it has conducted careful and extensive deliberations over the majority and minority reports. Many points made have been concurred in, and many have not. Our present objective is to seek the widest possible participation in our decisions by the membership in an effective effort to advance the best thinking of our association as a contribution to the delivery of medical service in the United States.

REPORT OF THE AMA COMMITTEE ON PLANNING AND DEVELOPMENT

IN NOVEMBER 1965, the Board of Trustees of the American Medical Association established a Study Committee on Planning and Development which was given the following tasks:

(1) To review and study current planning procedures and techniques in the AMA for planning and development; and

(2) To study and recommend new mechanisms and organizational arrangements to achieve more effective planning and development for the future.

The Study Committee, having completed its investigations, summarized its recommendations as follows:

(1) The AMA can improve its effectiveness by placing more emphasis on planning.

(2) The responsibility for planning should not be separated from the responsibility for managing the affairs of the Association.

(3) The planning process must be tailored to fit the uniqueness of the AMA.

(4) The House of Delegates, the Board of Trustees, all the councils and committees, and the Executive Vice President and his staff must make a significant commitment of time and other resources in order to make the Association's planning more productive.

(5) A concerted effort should be made to blend into the Association's planning efforts the knowledge and insights of many disciplines including medicine, sociology, economics, law, and any others which would bring more enlightenment to bear on the problems facing the Association.

(6) The Association must recognize that its present organizational structure does present severe limitations and may have to be modified at some future time.

The Study Committee went on to recommend that "the AMA establish a permanent Committee on Planning and Development," and suggested the objectives of the proposed committee and how it might set about achieving the purposes for which it was to be created.

To implement the recommendations in the report of the Study Committee, the House of Delegates, on the advice of the Board of Trustees, approved the establishment of a Committee on Planning and Development. In due course, the Board of Trustees appointed the committee and gave it the following charge:

(1) To study and make recommendations concerning the long range objectives of the Association and the resources, programs, and organizational structure by which the Association attempts to reach them.

(2) To serve as a focal point for the planning activities of the Association and stimulate and coordinate planning activities throughout the Association.

(3) To study, or cause to be studied, medicine and the environment in which the Association must function and transmit the conclusion of these studies, in the form of recommendations, to the Board of Trustees for distribution to appropriate decision making centers throughout the Association, particularly the House of Delegates.

INITIAL STEPS

The first meeting, held on January 26, 1968, was primarily organizational. The Committee reviewed the injunction it had received from the House of Delegates and the Board of Trustees and, after recovering from the shock of realizing the magnitude of the responsibility, attempted to break the task down into manageable parts.

It was agreed that the first step would be to scrutinize the environment in which medicine is now practiced, to identify current problems, and to analyze the reasons for their development. In addition to providing historical perspective, the analysis was to be the substrate for short-term policy recommendations.

Beyond this, the Committee thought it important to identify current trends by studying the forces that are influencing the practice of medicine. The evaluation of these trends in terms of their direction, vigor, and likelihood of enduring was to provide the basis for predicting the future form of medical practice and the social, economic, political, scientific, and technological

climate in which it would probably be conducted. The Committee also expected to use this study to develop recommendations on how these trends could be channeled, modified, supported or opposed in the best interest of the public and the member physicians of the Association.

Finally a study of the structure and function of the AMA was to indicate how well the organization is adapted to its presumptive future environment and what modifications, if any, will be needed to prepare it to be effective under the conditions that are anticipated.

From the sum of all the preceding observations, long-term recommendations on policy and organization were to be formulated.

The most pressing problems that medicine and the Association face are social, economic, legislative, and legal in nature. The Committee therefore decided to direct its attention primarily to these areas. Relatively little attention was given to the scientific and educational activities of the AMA except as they affect these more urgent considerations. However, the scientific and educational functions of the AMA are of secondary importance only in terms of immediacy, and they may well be the subjects of future reports.

As a first step, the Committee familiarized itself in detail with the structure of the AMA and the operation of its administration and its councils, commissions and committees. Much written material was made available by staff, of which the Review Committee reports of 1967 were particularly useful. To supplement this information, meetings were held with the Executive Vice President, the Assistant Executive Vice President, and the heads of the major divisions. The Committee's purpose was to elicit from each what he believed the long range objectives of his jurisdiction to be, and what obstacles he saw to their attainment, either within or outside of the organization.

As a last preliminary step, the Committee met with a Committee of the Board of Trustees, composed of Gerald D. Dorman, M.D., Chairman, Joseph B. Copeland, M.D., and Burtis E. Montgomery, M.D. The meeting was most helpful in further refining the charge of the Committee and outlining the scope of its endeavors.

BASIC CONSIDERATIONS

A few fundamental assumptions, decisions, and policy determinations were necessary to channel investigation and discussion along productive lines. It is generally agreed that, since medicine is a service profession, it cannot thrive and prosper unless the needs of the public for health services are fully met. Although recog-

inition of this principle is more or less implicit in the "American Medical Association—Purposes and Responsibilities," it is not clearly stated. People must be made aware that the medical profession recognizes a community of interests with them in maintaining the public health at the highest level attainable.

The Committee therefore *recommends*:

(1) That the AMA adopt the following as a statement of the primary purpose and responsibility of the Association and the medical profession:

"To endeavor, by all appropriate means, to make health services of high quality available to all individuals, in a dignified and acceptable manner, regardless of their social class, ethnic origin, ability to pay for services, or the source of the payment."

(2) The adoption of the following as a corollary or, rewritten, as a separate policy statement:

"The American Medical Association has the duty to guide and assist the medical profession in the attainment of this objective."

On adoption, these statements should be widely publicized.

The AMA has a second obligation which is somewhat more subtle and therefore harder to define. We are experiencing a soaring demand for health services as a result of better public education and more adequate funding for health care from insurance and governmental sources. This trend is augmented by the increasing complexity of medical science and by our adoption of progressively more stringent standards in judging the quality of professional services. It seems almost certain that unless some fundamental changes are made in the current system of delivering health care, the demand will outpace our ability to meet it, regardless of efforts to train additional personnel or build more facilities. Therefore, if the total health establishment is to meet the requirements and expectations of the public, it becomes mandatory that the individual professionals and the institutions that render health services be more closely organized and at a higher level than is now the case.

Some services require sophisticated equipment that is found only in hospitals. Many types of care necessitate a team approach that the solo practitioner and his consultants cannot readily provide.

Considerations of convenience, economy, and comprehensiveness will tend to force physicians into one or more formal types of organization. This may require attending physicians to share authority and responsibility with other individuals and even institutions, thereby diminishing their own. Partial transference will not only raise the question of where the ultimate authority to determine patient care lies, but will also tend to weaken and depersonalize the relationships between physicians and their patients.

Given present social values, the encroachment on physician-patient relationships will not be massive at first, since that would be resented by the public and the medical profession alike. Nevertheless, some degree of curtailment of the time-honored privileges, prerogatives, and authorities of physicians are already upon us and further encroachments seem inevitable if the public is to get the health services it needs at a price that it is able, or willing, to pay. To add to this picture, there are already indications that rising costs may bring about efforts on the part of government to regulate or limit physicians' fees, in an ill-advised effort to achieve economy.

It is generally agreed that independence in thought and action and a high degree of intellectual development are essential characteristics for those who aspire to be competent physicians. People of this caliber are likely to seek professions that, in addition to intellectual and personal satisfaction, promise freedom from regimentation, reasonably high standards of living, and adequate compensation. The study of medicine is a long and difficult discipline which must compete with less demanding professions for a limited number of qualified prospects. It can continue to do so successfully only if, in addition to the great personal satisfaction of medical practice, the social, financial, and intellectual rewards are sufficiently attractive.

The AMA must therefore be continually solicitous about the setting in which medicine is practiced and must attempt to maintain conditions that will attract the best qualified and most highly motivated individuals to the profession. Every effort should be made to keep regulation, restriction and regimentation to the absolute minimum compatible with the Association's avowed purpose of helping to deliver health services of high quality to all who need them. One way in which the Association can move toward this goal is to encourage and actively participate in devising practice patterns and delivery systems that are efficient, economical and non-restrictive for both the provider and the consumer.

The Committee therefore *recommends*:

That, while the AMA must be prepared to accept some circumscription of the traditional privileges and freedoms of physicians, the following policy be adopted:

"That the American Medical Association recognize the need for new and improved methods of delivering health services, that it encourage and participate in efforts to develop them, and

"That, in the interest of attracting the most highly qualified candidates to the field of medicine, it simultaneously make every effort to maintain and create incentives in medical practice. Among these incentives are minimal regimentation, a multiplicity of practice options, and freedom of choice for both physicians and patients."

Adherence to these principles is not only in the enlightened self-interest of the medical profession, but is in the public interest as well. All other policy decisions of the Association should be made in the light of these concepts.

At this point, two other decisions or assumptions had to be made, since they are fundamental to further recommendations made in this report. The first of these was the adoption of a definition of the term "health" since that definition will establish the dimensions of the health care field in which the Association will function. Many were considered and the one most in keeping with enlightened social and medical philosophy, in the Committee's opinion, was that of the World Health Organization.

The Committee therefore *recommends*:

That the AMA officially adopt the following World Health Organization definition of health:

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Given this interpretation, health services involve all aspects of man's ecology and their spectrum becomes much more extensive than the mere provision of medical services. The question then arises: How large a role should the AMA claim in planning for the future and in developing systems for the achievement of the goals in health care that were postulated earlier? The Association can follow one of three courses. It can limit its efforts and interest to matters that are purely medical and exhibit no concern for the other elements that enter into the attainment of the optimum degree of public health, such as education, housing, environmental control, transpor-

tation, civil rights, and the alleviation of poverty. Another alternative would be for the AMA to concentrate primarily on the medical aspects of health care but to show a continuing interest in the above non-medical components of health services. The final course would be for the AMA to claim an active role in the planning and development of all health plans and programs in all their ramifications.

Clearly, the orderly and effective provision of health services in the future and the planning and implementation of health care programs will call for multidisciplinary action and an unprecedented degree of cooperation among the health professions. The AMA has neither the facilities nor the personnel to undertake a regulatory and planning function on this scale. Even if it did, it does not have the authority to put the policies it might develop into effect, nor does any other single group, profession or association.

Nevertheless, there is now an almost total lack of leadership in devising methods for improving the utilization of our existing resources of personnel, equipment, and funds. The equally important problem of how to provide a progressively increasing range of services as limitations and shortages are overcome is also being neglected, pending the slow and painful organization of comprehensive areawide planning agencies.

Public health officials have attempted to fill this leadership vacuum, with but limited success. Restraints on their authority and scope of activity may have precluded their arriving at solutions for issues of such protean nature. In any event, both the interests of the public and those of the medical profession now require that the AMA and its constituent societies become actively involved in and endeavor to bring order and continuity to this presently chaotic field.

The Committee therefore *recommends*:

That AMA adopt an active role and take the initiative in developing *all* plans and programs for health care in *all* their ramifications that it encourage and assist state and county medical societies to do the same at their respective levels.

The last recommendation, although necessary at this point, is, of course, a generalization. The specifics of how it may be implemented will be suggested in succeeding sections. The foregoing portion of this report outlines, in very general terms, the range of interests and the scope of activities the AMA should assume to play an effective part both in the revolution that is currently sweeping medicine and in the era of systematic progress that, hopefully, will follow.

HOUSE OF DELEGATES / Continued

EVALUATION OF CURRENT TRENDS

In order to evaluate the trends that are now affecting medical practice and those that may affect it in the future, it is necessary to understand the public's attitude toward government and toward social programs supported by tax funds.

Perhaps the most obvious and striking change in public psychology since the end of World War II, and more particularly in the past decade, has been a great increase in expectation. The people *expect* better housing, education, environmental conditions, transportation, and health services. The problems involved in improving facilities and services in these categories are so complex and interrelated that simultaneous solutions covering broad geographic areas are often needed. In addition, since the programs must be massive, the costs are correspondingly great. As a result, local voluntary agencies, professional associations, management, labor, and all other groups and organizations comprising the private sector discovered that they have neither the funds nor the authority to plan and implement the programs that are required if public aspirations are to be met. Local and municipal governments found themselves similarly limited and turned to their states for financial support. The latter, hard pressed as they are for funds, have sought help from the federal government.

In response to these appeals from lower echelons of government and inspired by the public clamor for better living conditions, more and better services, and greater security, Congress created a number of social welfare programs. There are those who will argue that the demand for these was not spontaneous but was deliberately aroused and nurtured by those in government whose political philosophies incline toward the creation of a paternalistic, or even a socialist, state. There may be some truth in this belief, but it is idle to speculate on where the rise in expectations originated. The fact is that the public appetite has been whetted and, more significantly, that the majority of the people look to government for its satisfaction. They will support, or at least not oppose, the expenditure of large sums of tax money on broad programs for social welfare. As time goes on, this attitude will become progressively more important as a determinant of public policy. The mere existence of the poverty program and of new and expanded grants-in-aid for transportation, housing, education, research, hospital construction, and health services represents a concrete though unexpressed decision on the part of the federal gov-

ernment to intervene more directly in the lives of Americans by guaranteeing them many services and commodities that they hitherto were expected to provide for themselves. Although the involvement of the United States in extra-territorial military operations, foreign aid, and other commitments of money and manpower have limited the scope of some of these plans, the limitation is likely to be temporary. The principle has taken root, and as this country's external obligations diminish or its exuberant economy yields greater tax income, old programs will be expanded and new ones will be established.

This trend will be curbed only by the refusal of a sufficiently large portion of the population to be taxed for services they do not individually need. However, since most of the social legislation enacted to date has been poverty oriented and represents aid to the needy and underprivileged, this type of resistance is only now becoming evident. The short term endpoint of federal, state and local government activity in the area of social welfare is unpredictable. Nevertheless, it is safe to say that unless the private sector can propose effective solutions to existing problems, the next decade will see us moving in the direction of vastly broadened assumption of authority and responsibility by government, with a concomitant increase in public dependence on assistance programs.

Ironically, the organization necessary to satisfy the newly aroused public impatience for better living conditions, more government guarantees, and greater security is almost totally lacking. Most federal government programs of recent vintage, since they were created in response to pressure or crisis, were hastily enacted with insufficient regard for their cost or their feasibility in terms of facilities, administrative mechanisms, and professional manpower. In addition, partly because differences in local conditions, needs, and facilities dictated that planning begin on a local level, partly out of deference to states' rights, and partly because central administration of massive new programs was not immediately practical, recent social welfare laws have been limited by Congress to the provision of grants-in-aid or matching funds. Implementation of the programs has been left to the states within fairly loose frameworks of conditions, standards, and criteria. Usually, to stimulate the states into prompt compliance, the laws set time limitations on program activation. Most states, anxious not to lose their share of federal largesse, passed hasty, and often ill-conceived, implementing legislation and then placed their reliance on local and municipal governments to put the programs

into operation. The resulting confusion has seriously impaired the new programs and has brought about frictions and damaging waste of limited human and financial resources. In the general confusion, state and local legislators, administrators, and a new corps of government advisors have busily elaborated a great variety of favorite theories, plans and procedures, which, when translated into action, have proved to be costly and ineffective.

If our present social and political climate had to be described in a few words, it would be characterized by high aspirations, poor organization for achieving them, great but finite national wealth, high and rapidly rising costs, and an almost total absence of the comprehension needed to solve complex and interdigitating social problems. Nevertheless, those problems must be overcome, and the new laws, despite their glaring deficiencies, constitute at least a primordial soup, containing all the ingredients necessary for the generation of viable programs if only the proper catalysts can be found. Those catalysts are leadership and cooperation.

Clearly, the problems in the field of health alone, in their entirety, are beyond the influence and competence of the AMA to solve without assistance. Nevertheless, if the AMA were to take the initiative in devising plans for the improved organization and delivery of health services, it would not only be contributing to the attainment of its stated objectives relating to public health, but would also be leading the way to effective action in other fields. Specific recommendations to that end will be made later in this report.

RECENT LEGISLATION: EFFECTS ON HEALTH CARE AND IMPLICATIONS FOR THE MEDICAL PROFESSION

Having considered the general characteristics of social welfare legislation, let us turn to the examination of recent laws that have profound implications specifically for the practice of medicine.

Public Law 89-97 established Medicare and Medicaid. It has since been amended only in relatively unimportant details. Title 18 of the law establishes hospital and health service benefits for those over 65 years of age. Title 19 provides federal matching funds to encourage the states to create programs for the ultimate provision of a broad spectrum of health services to the indigent.

In its entirety, PL 89-97 has already had a protean effect on medical practice although its full impact is not yet generally appreciated.

Public Law 89-239, the so-called "Heart Disease, Cancer, and Stroke" law, is concerned with

hastening the diffusion of the knowledge gained from abstract and clinical research from the medical centers to the practitioners who are in intimate and daily contact with patients.

Public Law 89-749, the "Partnership for Health Amendments to the Public Health Service Act," was subsequently amended by PL 90-174. The law is directed toward creating agencies for area-wide, comprehensive health planning at the local, regional, and state levels. It is now only in its early organizational phases but will increase in importance as planning agencies are activated.

It is beyond the scope of this report to go into the details of these laws since they constitute a study in themselves. Suffice it to say, however, that, either implicitly or as they have been implemented, they firmly establish the following concepts as public policy:

(1) Every citizen has the *right* to the health services he needs.

(2) The services he receives must be of high quality and readily available.

(3) The responsibility for the quality and availability rests with the agency administering the program.

(4) Health services of high quality are defined as services that are "comprehensive," "patient-oriented," or represent a "continuum of services," in contradistinction to "episodic," or "disease-oriented," as our present system is alleged to be.

(5) Government, when necessary, will pay for health services either from the premiums of social insurance as it does in Medicare, or from general tax funds, as it does in the Medicaid program.

If we examine these concepts, each of them brings a number of questions and problems in its wake.

ABRUPTLY INCREASED DEMAND FOR HEALTH SERVICES

The thesis that every human being has a right to all needed health services is disarmingly simple and is now generally accepted. The fact remains that in the past one either paid for medical services or received them from government. In the latter case, the indignities of welfare processing and the frequently low quality of care were powerful deterrents to utilization. These deterrents have almost disappeared and, while no one mourns their passing, it is evident that their removal, coupled with more widespread health education, is creating an insatiable demand for health services, far in excess of that experienced when self-pay, insurance, or welfare allowances were the only sources of reimbursement for them.

SHORTAGES IN ALL CATEGORIES OF
HEALTH SERVICE

The increase in demand has been more than the health professions and the voluntary, proprietary, and government hospital systems could meet. A dismaying shortage of medical and paramedical personnel has become increasingly apparent.

Absolute Shortage of Physicians: The overall scarcity can be alleviated by increasing training capacity and efforts are being made to do that. The AMA has very properly supported greater registration at existing medical schools and the founding of new ones. This encouragement, designed to increase the output of physicians, should, of course, continue. The Association should also continue to explore the possibilities of shortening the total duration of medical education by a judicious combination of college and medical school curricula, lengthening of the academic year at the expense of vacation time, and specializing undergraduate education to correspond more closely to the specific field chosen by the student.

In the area of graduate education, consideration should be given to the shortening of residency requirements for specialty board certification since there is reason to believe that the abbreviation need not adversely affect the quality of training.

Area Specific Shortages of Physicians and Other Health Professionals—The Slums: If across-the-board scarcity were the full extent of the manpower problem, its solution would be relatively simple by the use of the above expedients, although there would necessarily be a few years of lag time before the effect of increasing training capacity became appreciable. Unfortunately, it is evident that there will be a continuing shortage of health care personnel for some segments of the population regardless of the total supply. The poor and underprivileged who inhabit the urban slums and ghettos are most deprived of essential health services and are least likely to receive adequate care in the near future.

It would be too facile to assume that they lack health care simply because they cannot pay physicians and other health professionals, and that the latter, for that reason, do not establish practices in their communities. If that were true, government subsidy of their health care would even now be mitigating the shortage. The poverty pockets are unattractive to health professionals for other reasons. They are characterized by a

high degree of racial tension, by lack of respect for private property, and by periodic outbursts of violence. To complete the picture, the few physicians who practice in such localities are subject to abnormally heavy workloads, poor compensation for the services they render, inadequate hospital facilities, and lack of assistance. Under these circumstances, the penalties of practice far outweigh the few rewards, and it is small wonder that there is an intolerable shortage of health manpower in these neighborhoods.

But the deficiencies of care for the underprivileged are not the most important reason for their generally poor state of health. Poor nutrition, inadequate housing, lack of education with its attendant joblessness, and the frustrations of adverse discrimination and segregation are probably much more important as causative agents. The correction of these inequities is a social rather than a medical problem. It depends on ethnic and racial adjustments which will require almost infinite cooperation, patience, and mutual understanding. Unfortunately, these commodities, like everything else, are currently in short supply. The final remedy for the health care ills of the ghettos will be the elimination of the influences that make them what they are. Although the medical profession has neither the capacity nor the responsibility to resolve these larger issues, it must be prepared to take an active part in doing so. The deficiencies, however, are too pressing to await the beneficial effects of long term planning, education, and racial and ethnic accommodation. Substantial numbers of health personnel are needed urgently.

Clinics financed by the Office of Economic Opportunity have as yet done little to meet this need. Relatively few groups have been established and, if complaints from a number of local medical societies are accurate, not all of these are in the deprived areas for which this type of federal financial support was intended.

Interestingly enough, there is no unanimity of opinion that the OEO concept of hospital-based multispecialty clinics is the answer to the health care problems of the slums. The National Medical Association, comprised largely of Negro physicians, many of whom have an intimate knowledge of the people and the unique needs and characteristics of the poverty areas, does not believe that it is. Health services, if they are to be effective, must not only be available, they must be acceptable to those for whom they are intended. There is some question whether the medical schools and centers that dominate the OEO clinics are attuned to the nuances of the manner in which health services must be offered in poor

communities. The cultural determinants of the utilization of health services are poorly understood by most medical center faculties and staffs. The NMA makes the point that more of the care should be rendered by physicians who have their origin and roots in the underprivileged areas and represent predominant ethnic or racial groups. This would not only result in better mutual understanding between patients and physicians but would also permit the self-sustaining to seek their health services from the same source and under the same conditions as do the indigent.

Historically, the health needs of the ghettos have been left to the voluntary and municipal hospitals and government at various levels to meet, while private practice excluded itself as a delivery mechanism. The belief has been growing among legislators and public officials that if hospital-based, closed panel clinics are most effective in meeting the requirements of the poor, they are equally applicable to other segments of the population. The obvious fallacy of this belief does not diminish the danger it poses to private solo and group practice as government pays an ever increasing portion of the national bill for health services.

It is therefore essential that the medical profession at least attempt to meet the medical care needs of the ghettos in the context of individual or private group practice with freedom of choice for both physicians and patients. If such an attempt is to be successful, financial assistance must be secured for physicians who are willing to establish group practices in these areas and who present organizational plans that assure a high quality, variety, and continuity of care. Such assistance, if not available from the Office of Economic Opportunity with its known penchant for hospital-based practice, might be available under the provisions of PL 89-754, which amends the National Housing Act to permit the Secretary of Housing and Urban Development to insure mortgages for the construction of facilities for medical practice groups.

Community leaders will have to cooperate by providing police protection necessary to permit the free movement of personnel. They may also be called on to devise financial incentives of various types to attract physicians to their areas.

If no physicians can be found who are willing to devote their full time to practice in underprivileged areas, there may be some who would practice in groups on a part-time, rotating basis given the proper incentives and technical assistance in structuring and financing their groups.

None of these expedients will fully rectify present conditions, but a beginning must be made.

It must be recognized that from a purely administrative point of view closed-panel, prepaid practice offers advantages to government. This type of practice may become the major or sole delivery system for government-supported programs if the privately practicing sector of the medical profession does not rise to the occasion by providing demonstrably superior care to the underprivileged. The proliferation of such programs would subject medicine to ever increasing regimentation and government control.

It should be noted that only a very small percentage of medical students are drawn from low income families and the underprivileged areas. It might be a practical expedient to select properly motivated, intelligent individuals from these backgrounds and finance their medical education, in the hope that they would return to practice medicine in the areas from which they came. Another, and less attractive possibility would be to require such physicians to practice in certain areas in facilities provided for them for a specified period of time, as a quid pro quo for the assistance they have received. This is commonly done in poor countries, in Latin America and elsewhere where the purely voluntary distribution of physicians would leave large gaps in medical services.

Area Specific Shortages of Physicians and Other Health Professionals—Rural Communities: The problems of the rural communities have some similarity to those of the poverty pockets. Again, heavy patient loads and poor reimbursement are often factors. In addition, the rural environment is unattractive to most young physicians and their families. They find it deficient in opportunity to engage in social and cultural activities, to educate their children, and to find entertainment. Rural practice generally does not afford the physician either the time or the facilities to continue his own professional education, and young physicians, in choosing a site to practice, are reluctant to forego the intellectual stimulation they experienced at the medical centers in which they trained. The relative importance of these factors varies with the individual and the location but it is evident that as the older MD's die in rural communities, they are replaced with great difficulty or not at all.

In this situation, again, some answers may be found in the development of inducements to attract physicians to the rural areas. Similar efforts, usually made by the communities themselves, have not been notably successful in the past but it is entirely possible that with state and local medical society assistance, more effective programs for recruitment can be devised. This is

HOUSE OF DELEGATES / Continued

important because, while rapid transportation of patients to urban centers may compensate for some of the deficiencies of rural health care, there is ultimately no substitute for the day-by-day services rendered by the local physician.

The Committee therefore *recommends*:

(1) That an appropriate committee or division of the Association secure data from all the state medical societies on the adequacy of health services and the manner in which they are being provided in their rural and underprivileged areas, and the practice mechanisms, if any, that are being considered or developed to correct existing deficiencies. Based on this information, the same committee should devise delivery systems consonant with the Association's principles and incentives for physicians to settle in medically deprived localities.

(2) That the Association, in conjunction with state and county medical societies, establish a service of consultation and assistance for such physicians to facilitate the planning and financing of their projects.

(3) That, in those instances in which physicians cannot be found to develop health care facilities with the capability of providing needed services, the AMA urge, encourage, and assist the state and local medical societies to do so on an operational basis.

(4) That the Association study the possibility of establishing a corporation for this purpose, with subsidiary corporations at state and local levels. All such corporations should be legally empowered to receive payments for services rendered and would apply surplus income over expenditures to activities designed to improve health care in their areas, both quantitatively and qualitatively.

(5) That the AMA and the constituent and component medical societies seek the active involvement of medical centers and voluntary hospitals in health service projects for the medically underprivileged.

The Committee emphasizes that the provision of health services in rural areas and in poverty zones *must not* be abandoned to the government by default.

SHORTAGES OF SPECIFIC CATEGORIES OF HEALTH PERSONNEL BY PROFESSION AND SPECIALTY

To consider further the matter of medical manpower, the short supply of generalists or family physicians represents another major deficiency. Again, new incentives must be created to reverse the inexorable diminution of those who, in addi-

tion to providing basic care, serve the important function of coordinating medical services for their patients. Not the least of these new attractions would be the assurance of a higher professional standing than these physicians have enjoyed in the past and the admission of generalists into hospital practice on an equal prestige footing with the specialists. The Association has moved in this direction by recognizing family practice as a specialty. This action, coupled with widespread establishment of general practice sections in hospitals, could slow or reverse the trend away from general practice. These questions have been discussed at such length in medical circles that they hardly require further elaboration in this report.

The Association's public pronouncements on manpower deficiencies to date have emphasized the general shortage of health personnel and have highlighted suggestions and efforts to increase training facilities and enrollment. This is an oversimplification since these measures alone will not suffice to overcome current deficits and meet new demands. When this fact becomes apparent, the AMA will again be criticized for having failed to recognize the true dimensions of the problem.

The Committee therefore *recommends*:

(1) That the AMA, through its Council on Health Manpower, in conjunction with other professional, educational, and lay associations, continue to explore and develop expedients to overcome health manpower shortages.

(2) That the Association, in its future declarations and activities directed toward the alleviation of shortages in health services and personnel, underscore the fact that these shortages are *not* due merely to an insufficient number of health professionals across-the-board, and emphasize that maldistribution of practitioners geographically, by profession, and by specialty is an equally important factor in depriving communities of an adequate supply and spectrum of health services.

(3) That the Association publicize the reasons for the maldistribution, as outlined in this section, and stress that the *voluntary* correction of these deficiencies requires public cooperation and community action in addition to the measures taken by the health professions.

The limitations of the service capacity of the health professions will be a matter of increasing concern for the public as well as the professions. Overcoming relative and absolute manpower shortages will take time, possibly a decade or more. During this time, the demand for health services will multiply as the population grows, urbanization and personal incomes increase, the

proportion of the aged rises, health education is more widely disseminated, and more government funds are allocated for health programs. This trend will aggravate the present disproportion between the supply of health professionals and the increasing demand for their services. Any reasonable device must therefore be explored to conserve the time of overworked physicians. One expedient would be to limit the services they perform to those that require the exercise of their special skills.

Use of "Doctors' Assistants" to Augment Medical Service Capacity: One proposal designed to stretch the service capacity of the medical profession with the present supply of physicians has been that less highly trained individuals be specifically educated and utilized to perform routine examinations and treatments. Several experiments in the training and use of doctors' assistants are now in progress. The University of Colorado is conducting a project for training registered nurses to do some procedures in pediatric practice, particularly well-baby and routine care. The plan operating at Duke University is intended to train modern and improved versions of army medical corpsmen. In a number of areas, proposals have been made to revive the use of nurse-midwives for uncomplicated obstetrics. Many persuasive arguments have been advanced in support of utilizing personnel with a medium level of training to relieve the pressures on more highly skilled physicians and thereby meet the demand for services. To a limited degree, and in chosen localities, this device may indeed be necessary and useful. The entire concept, however, is heavily booby-trapped and before it is enthusiastically adopted by the medical profession, some caveats are in order.

Physicians who are too busy to render complete medical care to their patients may well be too busy to supervise the services rendered by their assistants. This could result in a significant deterioration of services. Furthermore, since the legal responsibility for patients rests with their physicians, the use of assistants on a large scale opens a wide and unappetizing vista of ever increasing malpractice litigation. Another and rather obvious disadvantage of employing assistants in this new and expanded sense is that it would further depersonalize medical care precisely when the profession, to preserve some of the positive values of current medical practice methods, is endeavoring to strengthen the personal relationship between physicians and their patients.

This expedient, if generally adopted, would be applied to a great number of specialties and would result in the creation of a number of sub-

professions which would be a nightmare to license, limit, audit and supervise. Understandably, but inevitably, the new assistant groups would seek to widen the permissible scope of their services and to increase their responsibility, authority, remuneration, and independence of action. This could seriously compromise physicians' responsibility for the care of their patients, and materially increase the cost of that care. The medical profession must not fall into the error of accepting the principle of creating corps of "doctors' assistants" except with stringent safeguards and provision for their close supervision.

The Committee recognizes that the productivity of physicians must be increased if shortages in health care are to be overcome, and that one method of doing so is to utilize the services of doctors' assistants. While not wishing to discourage the adoption of this general principle, the Committee reemphasizes the need for appropriate guidelines and safeguards.

The Committee therefore *recommends*:

(1) That an appropriate Committee of the AMA immediately begin to formulate a policy on doctors' assistants, particularly with regard to their responsibilities, limitations on their practice, and supervision of their services by qualified physicians.

(2) That the AMA reaffirm the principle that the basic responsibility for the care and welfare of patients lies with their physicians of record and that that responsibility cannot and should not be delegated.

(3) That the Association's Law Division assist the state medical societies in identifying and avoiding any legal hazards that may accompany the employment of doctors' assistants.

DELIVERY SYSTEMS FOR HEALTH CARE

Partly because of manpower deficits and partly because of the rapidly rising costs of health care, the Department of Health, Education, and Welfare has exhibited a keen interest in delivery mechanisms for health services. A National Center for Health Service Research and Development has been created in the department. The center, not yet in full operation, will conduct field studies to evaluate programs in being, develop pilot projects and demonstration programs, and gather data on all known methods of providing health services. Ultimately its recommendations will probably establish HEW policy on the programs under its jurisdiction. Ideally, the center will accumulate detailed information on the effectiveness, cost, and acceptability by the public of various health service mechanisms and make objective recommendations based on that informa-

tion. Indications are that the major focus of its interest will be group practice.

In many ways that need not be enumerated here, group practice, as compared to solo practice, has substantial advantages for both physicians and patients. As a result, the percentages of physicians engaged in private, fee-for-service, group practice has been rising steadily. Most groups are of the multispecialty type and offer a reasonably broad range of services. Less commonly, they are composed of physicians in a single specialty. Characteristically, they are reimbursed on a fee-for-service basis and all the members are partners, which gives them a direct stake in maintaining high standards.

The other main type is the so-called closed panel group which accepts patients for all the care they may need on a prepaid, capitation basis rather than fee-for-service. This requires the interposition of an insurance carrier between the patients and the providers of service. In some instances the physicians are partners in the group but the majority are employed on either salary or per-session payments.

The major exponents of this arrangement are the Health Insurance Plan of Greater New York in the east, and Kaiser-Permanente Plan on the west coast. In addition to the advantages of group practice in general, both have claimed lower hospital utilization and morbidity rates than are experienced in insured groups that have a reimbursement type of health insurance and pay fee-for-service. They attribute these claims to more effective preventive care and treatment, but such claims, of course, are almost impossible to substantiate. It can be argued, for instance, that low rates of hospital admission and short duration of stay may well represent inadequate rather than optimum utilization. Morbidity rates are difficult to compare because of the differences inherent in the two systems. The patients of a prepayment group are largely members of a consumer organization of one type or another. In the majority of instances, the contract is negotiated between an insurance company distinct from the medical group and a labor union or other consumer agency. The patients resulting from this type of selection often have group characteristics that invalidate comparison with the randomly selected clientele of fee-for-service individual or private group practice. In addition, the differences in the manner in which the two systems render services and the tendency of patients of a prepayment group to seek the services of a personal physi-

cian outside the group for grave illnesses makes the comparison of statistics very misleading.

Aside from these considerations, closed panel, prepaid practice has several definite disadvantages for patients. Once families or individuals have enrolled in a plan that provides this type of care, they have lost the right to choose their own physician. In theory, they can select any member of the group, but the actual choice is almost nil because of the relatively small numbers of physicians in the groups and their limited availability. The patient's freedom to join another group in the same plan is hypothetical rather than actual since distance and convenience almost forbid such transfers. Those patients who want treatment or consultation outside the plan must pay a penalty for doing so since there is no provision for reimbursing them for their expenditures.

Whatever the reasons, insurance programs based on closed panel practice have not been remotely comparable in growth to those that pay fee-for-service benefits and allow free choice of physician, in spite of the fact that the former offer a complete spectrum of care while the latter have varying limitations, exclusions and co-pay features. There must therefore be some element in closed panel practice that militates against its general and enthusiastic acceptance by the public.

The Committee does not propose to advocate any particular type of practice. It is disquieting, however, to learn that, after establishing a center supposedly intended to evaluate the various systems, high officials of HEW have already reached their own conclusions and openly favor prepaid health care delivered by closed panel groups. They are probably influenced by the ease with which the distribution of personnel and the range of services can be controlled in closed panel practice. In addition, cost control, via negotiation for capitation rates, is certainly simpler and more predictable than it is with the usual, customary, prevailing, and reasonable method of reimbursement (hereafter abbreviated to UCPR). In spite of the simplicity in negotiating and predicting costs in the prepaid group practice system, however, the cost economies such groups claim have yet to be proven. Whatever the reasons, the attitude of the officials of HEW is the antithesis of the impartial analysis and objective decision that were hoped for and that are necessary to determine the relative merits of the different practice mechanisms. This type of prejudice could not only result in costly and harmful errors in the administration of tax supported

programs, but could affect the private sector adversely.

The House of Delegates, at the 1968 Annual Convention, recognized this and adopted a resolution that "The AMA strongly disapproves the provision of funds by the federal government for subsidizing any one form of organization of medical practice." Unfortunately, the same resolution went on to state, "Resolved, That the AMA continue to espouse the private, fee-for-service practice of medicine." It is hardly logical for the Association to call for objective experimentation in the organization of medical services and in the same breath to express its preference for private, fee-for-service practice. It is equally inconsistent to call the Department of HEW to task for giving preferential support to one form of medical practice and simultaneously express the Association's prejudice for another.

It is well to remember that the Association represents members who are engaged in all types of medical practice and that they must be represented impartially. Furthermore, there are many possible variations and combinations of solo practice, fee-for-service group practice, prepaid capitation practice and even physician employment that may be useful in providing care under certain circumstances. Combinations of fee-for-service payment and prepayment are also possible. It is well known, for instance, that one of the major obstacles to the development of voluntary insurance coverage for out-of-hospital services has been the prohibitively high cost of processing large numbers of small claims. In many cases the processing cost is almost equal to the payment, which almost prevents such services from being insurable and which may in part be responsible for the high cost of Medicare. One possibility for overcoming this disadvantage is to establish a prepaid pool on which physicians, individually or in groups, could draw for certain types of individual services, thereby eliminating the costly processing of small claims. Fee-for-service payments could be retained for larger and more readily identifiable items of care. Similarly, it is possible that pediatricians would accept capitation fees for well-baby care while retaining fee-for-service for the balance of their practice. The Committee does not wish to suggest specific types of organization or payment. It merely wishes to point out that there are many possible combinations and permutations that may be useful in the future and that the Association should not be on record as being opposed to any of them until they have been fairly tried.

The immediate needs to be met are enormous

and are creating proportionate pressures. The virtually uncontrollable rise in the public's bill for health care will dictate the most stringent evaluations of cost effectiveness. Under these circumstances, all varieties of organization for health care and many methods of payment will be put to the test of competition regardless of the position the Association may take. Rather than support particular kinds of organization and payment for health services and oppose others, the AMA should devote its energies to establishing the criteria by which they are judged. These standards should transcend the mere logistics of delivery and the cost of care. They should include considerations of the quality of care, the dignity of the circumstances under which it is provided, and the choice of options that the plan allows for providers and consumers.

The Committee therefore *recommends*:

(1) That the Association take no public position for or against private solo practice, private group practice, closed panel group practice, fee-for-service payment, or prepayment by capitation.

(2) That an appropriate committee of the AMA be charged with the task of establishing the basic criteria which any proposed system of delivery of health services or mechanism for payment must satisfy to be acceptable.

(3) That the Association, in all public statements, emphasize the concept that differences in education, culture and income levels create problems that may necessitate different systems of delivering medical care for different population groups.

(4) That the state and local medical societies be encouraged and assisted in devising and proposing practice expedients suited to their localities and their problems.

(5) That the Association, in conjunction with the state and county medical societies, establish a consultation and assistance service for physicians or groups of physicians who wish to develop organizations or programs for the rendering of health services.

(6) That the AMA endeavor to be informed of the pilot projects that are proposed by other sources and that it request the Department of HEW to discuss those projects with the Association before they are put into effect.

(7) That the Association seek to insure that the value judgments made by the Department of HEW on plans, programs, pilot projects and payment mechanisms are firmly based on the criteria and standards the AMA has developed for that purpose.

MEDICAL SOCIETY NEGOTIATION OF CONDITIONS, REGULATIONS AND FEES IN GOVERNMENT PROGRAMS

Another manifestation of the government's interest in costs has been a careful scrutiny of professional fees, particularly those of physicians. The acceptance by government of the usual, customary, prevailing, and reasonable (UCPR) principle of payment for the Medicare program was encouraging as an indicator that there would be no direct attempt to dictate physicians' fees beyond keeping reimbursement in line with current cost levels. It should be borne in mind, however, that the adoption of the UCPR concept is provisional rather than final and that it has yet to prove itself as an economical method of payment for health services. Physicians' fees have been rising and, in the past few years, they have done so at a rate exceeding the rise in the various cost indices. There has also been an appreciable increase in physicians' incomes since 1966 while, during the same time, the medical profession has been unable to bring about a material expansion of its capacity to deliver health services. In the face of the unexpectedly high cost of new health service programs and on the basis of these superficial observations, the right of physicians to augmented incomes is being questioned in many quarters.

Aside from using fee levels, which are now showing signs of levelling off, there are two major factors that brought about increases in physician income. The first of these was the abandonment by government of the charity and "welfare discount" concepts in the provision of health care to the indigent. Quite correctly, the decision was made that cut-rate or charitable services did not result in a high quality of care for the medically needy, and the principle of payment at the "going rate" was therefore established. As a result, many physicians are now being reimbursed for services they previously rendered gratis, which others are being paid at a higher rate.

The second factor contributing to the rise in physician income is the upsurge in demand that has been created by expanded government funding of health care for the indigent. Although the capacity of the medical profession as a whole to meet this demand may have been insufficient, many physicians did accept heavier work loads which increased their incomes correspondingly.

The Committee does not wish to justify the income and fee increments in this report, but it is important to recognize that rising costs and fees have already been responsible for one congress-

sional investigation and are causing rumblings from consumer groups, labor unions, and government agencies that fee-for-service and UCPR merely enrich physicians and encourage the continuous escalation of charges without corresponding improvements in services. If, therefore, these methods of payment are to survive, it is imperative that the medical profession be able to demonstrate that fee levels are reasonable and that they are not permitted to increase without good cause. In order to do this, the medical societies at all levels must have access to data that are unbiased, accurate and beyond challenge.

The Committee heartily supports the UCPR concept and urges that the AMA and the state and local medical societies do everything in their power to widen its application. Nevertheless, there are many programs which are still based on negotiated fee schedules such as some state plans implementing Title 19 and most Workmen's Compensation programs. The possibility cannot be overlooked that the government may turn from the UCPR concept at some future date in spite of the efforts of the medical profession. The societies must therefore be prepared to achieve usual and customary fees by negotiation as well as to negotiate the conditions, regulations, and procedures that apply to physicians participating in government programs.

There are two essentials to effective negotiation. The first is a complete and accurate body of information on all aspects of program operation. The second is a corps of seasoned and knowledgeable negotiators.

It is understood that fee negotiations do not fall within the province of the AMA since most of these take place at the state or, rarely, at the county level. On the other hand, the Association could very well serve a useful function at the federal level by negotiating all other aspects of tax-supported health programs. It must, therefore, have access to data. In addition, most state and local societies are hampered in their discussions with government by lack of knowledge of conditions and developments in other areas. Many of them do not have effective machinery for gathering information or have not yet recognized the importance of that function. They would derive great benefits from analyses and recommendations made by the AMA, based on data which the Association in any case requires for its own purposes.

The Committee therefore *recommends* that the Association:

- (1) Urge state medical associations to undertake various studies, including surveys of prevailing medical fees.

(2) Develop a uniform methodology for conducting such studies to the end that the data from the various states and localities be comparable.

(3) Serve as a clearing house for the material thus obtained and, after analysis, redistribute the data to the state medical associations with suggestions and conclusions.

(4) Urge the state medical associations to designate negotiators who are qualified to deal energetically with government agencies on all matters pertaining to tax-supported programs. Such individuals or groups should be formally appointed and the government jurisdiction involved should be notified that all negotiations will be conducted by them.

COST CONTROL OF HEALTH CARE: UTILIZATION AND MONITORING OF PROFESSIONAL FEES

One other aspect of physicians' fees deserves consideration. Over the past two or three years, Association spokesmen have admitted that the medical profession has a responsibility in helping to keep the costs of health services within reasonable limits. They accepted for the profession not only a responsibility for the overall control of fee levels but also for furthering the optimum utilization of facilities and ancillary personnel as a curb on hospital costs. With regard to the latter, the medical associations can assume only an educational function. The direct control of hospital utilization must devolve on appropriate professional groups within the hospitals themselves since such policing is beyond the scope and authority of medical societies. This makes utilization control no less a medical function; it merely places supervision and authority where they can be effectively exerted.

In accepting the responsibility for curbing costs by keeping fees within reasonable limits, our spokesmen were wise but, under the circumstances, over-optimistic. It must be remembered that medical societies have absolutely no jurisdiction over the charges made by their members. Medical society grievance committees, in adjudicating fee disputes between physicians and third parties, act on the premise that they are merely limiting the financial obligation of the insurer, rather than setting a value on a physician's service or a ceiling on his charges. When hearing disputes on fees between individuals and their physicians, such committees either rely on the exercise of moral suasion or they require preliminary agreement by both parties to accept the outcome of arbitration. In no case do grievance committees or the societies they represent have the legal power to require a physician to reduce

his charges. As far as tax-supported programs are concerned, there are other means that can be used to control fees, such as the withholding of payment for services by the paying agency either on its own decision or on the recommendation of the medical society concerned. In some instances, physicians have been excluded from programs they were allegedly abusing or have been required to seek authorization prior to treatment. Again, this is done on the authority of the program administrator, with or without the advice and consent of the medical society of the area.

The medical profession must now decide whether it is prepared to meet the obligation it has accepted for cost control through the monitoring and containment of fee levels. If the answer to that question is in the affirmative, a choice must be made between relying on the powers of program administrators for enforcement and seeking direct authority for the medical societies at state and county levels.

The Committee is of the opinion that fee policing or, indeed, any other supervision of physicians is best kept in the medical societies. Peer judgments are much more likely to be just and equitable in these matters than are decisions made by outside agencies. At the same time, if the societies elect to make only the judgments and, by agreement, leave enforcement to government agencies, they may at some future time be excluded from both functions.

Again, the monitoring of fees does not fall within the province of the AMA but the Association should advise the state and county medical societies to assume that function and should assist them in securing the necessary powers.

The Committee therefore *recommends*:

(1) That the AMA urge state and county medical societies to assume the functions of monitoring fees and containing the costs of health care.

(2) That the Association, in cooperation with the constituent societies, determine what powers the state and local societies require to serve these functions and how those powers can be best obtained.

AUDIT AND POSTGRADUATE STUDY

The medical profession has accepted other obligations in the operation of tax-supported programs, particularly Titles 18 and 19 of PL 89-97. Written into this law are requirements for medical audit to assure the government that it is paying for services of acceptable quality. In-hospital audits are being conducted by the hospital professional staff and are apparently encountering no major difficulties since there are no problems

of authority involved. However, it should be noted that the science or art of evaluating medical services on a large scale is in its infancy, to say the least. The peer judgment method, when limited to a few randomly selected cases, is crude, time-consuming and relatively uninformative. The conclusions drawn from a few well publicized studies of this type in the early 1960's demonstrate their inaccuracy and the facility with which improper selection can distort the findings.

If in-hospital audit of medical services by the peer judgment method is to be effective and if it is not to require a prohibitive expenditure of physicians' time, mechanical or electronic means of pre-selection must be developed so that auditors are given high-yield batches of cases to review. Both the pre-selection methods and the audit criteria must be uniform through several counties, a region, or even a state, so that meaningful comparisons can be made. It would even be advantageous to develop them on a nationwide basis.

If in-hospital audit of medical services is in its infancy, the audit of office services is barely embryonic. Nevertheless, partly as an outgrowth of the distorted studies previously alluded to, the public has developed a lack of confidence in the quality of medical care. In-hospital audits may ultimately allay their fears concerning the care they receive in these institutions but, since office services, unlike hospital services, are completely unsupervised, demands are being made in some localities for evaluation of the quality of office practice.

In New York City, for instance, the administrators of the Medicaid Program are conducting on-site surveys of some physicians, particularly those who bill in excess of certain amounts for services rendered to assistance recipients. The basis of this particular selection is that the volume of services rendered precludes, or may preclude, their being of high quality. There is already clear evidence, however, that the administrators intend to extend this procedure to the maximum degree possible. Although the medical societies have protested this activity on grounds that will be developed in this report, it is continuing and is being enforced by the city's power to withhold payment or to disqualify individual physicians from Medicaid practice. The situation in New York is as yet unique but it does serve as an example of what may happen in government programs.

On the same subject of office audit, the Committee reviewed with great interest the report en-

titled "Continuing Medical Education—A New Emphasis," emanating from the Association's Division of Medical Education. The Committee does not wish to review that report which, incidentally, is well worth reading, but a few of the findings are germane to this discussion.

The educational process described in the report is ingenious and stimulating but of even greater interest is the motivation of the physicians who participated and the implications that motivation has for the quality of care.

Essentially, the physicians of Utah were given a mechanism whereby they could evaluate their skills and self-analyze their educational deficiencies. On the basis of their analyses, they were given an opportunity and a time-economical method to update their skills in a priority sequence.

What is of the utmost significance is the fact that on the initial contact 476 physicians responded out of a possible 907 for a response rate of over 50 per cent. Many of the non-respondents were specialists who already had facilities available for the continuation of their medical education. Surely this pilot project indicates that much of the problem of continuing medical education can be solved on a voluntary basis if the proper programs are developed.

The great advantage of the voluntary approach is that the individual physician is likely to spend his study time in the fields that have the greatest importance to his own practice and in which he may need additional education most urgently.

If we compare this to the external-audit-by-officialdom approach, it becomes obvious that the latter is punitive and regulatory in nature. Under these circumstances, the best that can be expected of physicians is minimum compliance and thus, in a very real sense of the word, the external audit is self-defeating. It is therefore in the interest of physicians and patients alike that efforts to perfect and widen the application of voluntary self-audit and postgraduate study be accelerated and that, to the extent possible, government health officials be convinced that the objectives they hope to attain by instituting their own audits are better achieved by voluntary means.

In spite of these arguments, it seems necessary to assume that the demand for the evaluation of the quality of office medical and surgical procedures will increase, especially as government programs and insurance plans cover more of these services. Even management and those unions that purchase health insurance for their members are beginning to demand proof of the quality of

the care for which they are paying with their premiums.

In their present state of under-development, however, externally conducted office audits can do little but hamper physicians in their work and yield data that are impression or surmise at best. Methods of evaluation must therefore be developed that are sparing of physicians' time and that produce factual and useful conclusions. It is also important that the legality of such audits with regard to the privacy of the patients' records be determined.

The Committee therefore *recommends* that the AMA:

(1) Endorse the principle of voluntary, life-long postgraduate study for all physicians and continue and accelerate the development of programs and incentives for such study.

(2) Through the state medical societies, investigate the current status of in-hospital audit methods and make a similar investigation of the state of development of the evaluation of office services.

(3) Encourage and assist the state medical societies and state departments of health and welfare to develop uniform and effective methods of audit for both office and in-hospital services, based on electronic data processing, to the maximum possible extent.

(4) Request the Law Division to clarify the extent to which a physician's responsibility for the privacy of his patients' records will permit him to cooperate in an audit of his office practice.

SPECIAL REQUIREMENTS TO PARTICIPATE IN GOVERNMENT PROGRAMS—LICENSURE

If we assume for a moment that excellent evaluation methods have been developed, what, then, do we do with physicians who are practicing demonstrably poor medicine? To revert to New York City, such cases, with their documentation, are being referred to the county medical societies for action. Those societies, however, have no jurisdiction over the quality of medicine practiced by their members, their qualifications, or their efforts to keep their skills current. They can admonish but not act.

This lack of specific authority has led the New York State Department of Health to extrapolate its legal responsibility for the quality and availability of health services into a right to demand qualifications of specialists and postgraduate study requirements of generalists who wish to render services to Medicaid patients. The requirements themselves are not unreasonable but they raise the difficult and important question

of whether a physician requires a second license, other than that granted by the usual state licensing agency, to render services to patients under tax-supported programs.

The mere existence of a double standard is undesirable and it seems logical that, if the quality of practice in a state is poor among an appreciable number of physicians, the state's requirements for licensure and practice are inadequate and should be tightened. Once the determination has been made that this is the case, the drafting of new standards would best be accomplished by the cooperative efforts of the Board of Regents, the State Department of Health, and the State Medical Association.

The true extent of this problem of quality, if it is a problem, has never been assessed. Certainly it is not very great with the specialists. Although their associations impose no postgraduate study requirements on them, their certification requires a certain level of initial training and the regulations of the hospitals in which they must practice insure at least a degree of exposure to the advances in their field.

The generalist, on the other hand, can be licensed in most states with little graduate training and if he is not a member of a general practice academy or a hospital staff member he may never attend another conference, seminar, or lecture in his life. Again, the Committee has no concrete evidence that this happens to any great degree and the general practice academies, as they expand their memberships, are making rapid strides toward making postgraduate study for generalists, on a voluntary basis, more universal.

In spite of the fact that deficiencies in the quality of medical care have not been demonstrated or documented, various recommendations have been made for both specialists and generalists to insure that they are maintaining their skills. These include compulsory postgraduate study, periodic reexamination, recertification and relicensure.

To a degree, most of these proposals are over-reactive and although the Committee does not oppose their general intent, their heedless application may have grave consequences. The questions must be asked whether these expedients would be effective; how much hardship they would create for the hardest working and most needed segments of the profession; what general and regional shortages of medical manpower they would cause; and if they are necessary, by whom should they be promulgated and enforced?

The Committee finds it difficult to advocate or support compulsory requirements until the voluntary alternatives have failed. Yet it is aware that

public and governmental pressures are already being exerted for compulsory requirements, at least as far as tax-supported programs are concerned. State medical societies have generally taken little action in this regard. The Oregon Medical Association has adopted an interesting and perhaps unique "shape up or ship out" policy on postgraduate study that may well be effective there but that would be subjected to almost immediate legal challenge in many other states.

In general, rather than accept a double standard for licensure, it would seem preferable to revise the state education laws or, better yet, to develop a national professional education law that would modernize and update undergraduate, graduate and postgraduate requirements.

The Committee therefore *recommends*:

(1) That the AMA encourage and assist all state medical associations to devise programs for voluntary postgraduate study designed to maintain medical education at an optimum level and to be least disruptive to the provision of medical services.

(2) That the Association obtain information from each state medical society as to whether special requirements have been imposed on physicians who render services to patients under the provisions of tax-supported programs and obtain the specifics of what those requirements are.

(3) That in those states where the health or welfare departments have imposed special requirements on physicians to participate in their programs, the medical society reject those requirements and that, if the need for such regulation can be demonstrated, the state medical society, education department, and health department cooperatively develop standards to be incorporated into the education law and enforced on all physicians of that state, thereby eliminating double standards for medical practice and restoring the licensing authority to the proper agency.

HOSPITAL BED SHORTAGES; UTILIZATION; PHYSICIAN-HOSPITAL RELATIONSHIPS

Before the enactment of PL 89-97, one third or more of this country's entire bed capacity was obsolescent. The chronically underfinanced voluntary hospitals were forced to postpone capital improvements and construction to meet steadily rising operational costs. Rapid advances in medical technology brought the obsolescence rate to a point where the entire national hospital plant

was in a state of gradual but steady deterioration and shortages of hospital beds became progressively more acute and more widespread.

Although the implementation of Medicare and Medicaid did not increase hospital utilization as much as had been feared, it did augment the demand considerably. This, coupled with grave deficiencies in extended care facilities and a consequent misuse of hospital beds, has further aggravated hospital bed shortages. It is questionable that construction of hospitals and extended care facilities will catch up with these deficiencies in the next five or ten years.

To minimize the effect of the short supply of beds, the Medicare Law requires utilization review procedures in all approved hospitals. The problems inherent in utilization review are not as great as those in medical audit, but the same general comments apply. The methods adopted by the hospitals lack uniformity and the data adduced in the hospitals, cities, regions, and states are not comparable. The shortages of beds in all categories, however, is an enormous incentive to physicians and hospitals alike to achieve optimum utilization. Until those shortages are eased, the misuse of hospital facilities is not likely to be tolerated.

There are some aspects of hospital utilization, nevertheless, which still merit study. As extended care beds and home care personnel become more available, the choice of the correct facility will become an important factor in proper utilization, and guidelines should be developed to assist physicians in making their choice. The use of x-ray departments and laboratories on a more or less continuous basis should be explored with the object of cutting down preoperative waiting time and eliminating the week end hiatus syndrome. The improved use of OPD facilities both for preoperative work-up and to avoid admissions is another example that comes to mind.

A thorough discussion of utilization is beyond the scope of this report but the Committee notes that physicians, as individuals, have a major responsibility and role in achieving the best possible utilization of hospital facilities, a responsibility they are rapidly learning to meet. Many medical societies have studied utilization problems in some detail and are ready to assist and cooperate with hospitals if they find the welcome mat out. The achievement of goals in utilization will require the efforts of all three groups and the establishment of the necessary relationships is the responsibility of all three.

The lack of an adequate number of hospital beds has also had a profound effect on the relationships between physicians and their hospitals

as well as the relationships between salaried and voluntary staff members. As teaching programs are expanded, the salaried staff grows in size and influence while more and more beds are pre-empted for teaching purposes. Accommodations available for patients of voluntary staff physicians have dwindled progressively and the waiting period for admission of such patients is now six weeks or more in some cities. Since the availability of hospital beds is a matter of survival for private practitioners, this situation has given rise to much rancor.

Admittedly, there are pressing problems on the academic side as well and it would seem that both groups have a great stake in reconciling their differences. Actually, in most hospitals major disagreements still exist. The recommendation has often been made that all patients be part of the teaching program and that hospitals and physicians work together to eliminate the legal and social barriers that may exist. Yet the teachers wish to retain control of their services and the private attendings their authority over the care of their patients and, except in a very few hospitals, no solutions have been forthcoming.

In addition to these sources of friction, the distribution of funds earned for services rendered to patients for whom there is government reimbursement available has created ethical, legal, financial, and organizational problems. These questions have too many implications and ramifications to be considered thoroughly in this report. The Committee merely wishes to note that the House of Delegates, in adopting Resolution 40 in November 1967, recognized the existence of these trouble spots in hospital staff relations and laid down guidelines intended to eliminate those having to do with the distribution of income. The guidelines are insufficient to solve even this one facet of the total problem but they are a beginning and can be further broadened and refined.

The "town and gown" stress syndrome warrants much more than mere academic interest. Its importance grows as hospitals expand, merge, and reorganize and as hospital care patterns are modified and staffs are reconstructed. The medical associations have no direct authority over hospitals and, generally speaking, the attending physicians at each institution must work out their own formula for their relationships with each other and with their hospital. The hospital associations are similarly limited in their authority over member hospitals. Nevertheless, in some areas the medical societies and the corresponding hospital associations have been able to agree on some basic principles that apply to these staff

situations and are gradually prevailing on hospital administrations to accept them. This is a slow and roundabout process but it seems to be the only way to regularize these complex relationships and restore peace and stability to hospital staff functions.

The Committee therefore *recommends*:

(1) That the Association secure data from state and county medical societies on problems in physician-hospital relationships in their areas and the measures, if any, that are being taken to solve them.

(2) That, on the basis of these data, the Association identify the basic principles that apply to staff-hospital relationships and encourage state and county medical societies to do the same.

(3) That the Association and each state and county medical society request its counterpart in the hospital association structure to assist in developing guidelines and urge their member associations and hospitals to implement them.

EFFECTS OF MEDICARE AND MEDICAID ON VOLUNTARY HEALTH INSURANCE

No discussion of PL 89-97 and its impact on medical practice would be complete without an analysis of its effect on voluntary health insurance and the voluntary carriers. One aspect of this relates to the manner in which the carriers are functioning as intermediaries in Part B of Title 18.

Following the enactment of PL 89-97, the medical profession, through the Association, strongly supported the use of the Blue Shield Plans in the administration of the medical portion of Title 18 and, where possible, that of Title 19 as well. Although the Blues were not designated the sole administrators of Title 18, they did succeed in being selected as intermediaries in the majority of cases.

It is interesting and informative to speculate on precisely why physicians were so anxious to have the Blue Plans administer the Title 18 and Title 19 programs. One reason was that the Blue Shield Plans were existing, functioning entities with a known capacity for program administration. Another was that their requirements, forms and procedures were familiar to the physicians who had supported their programs through the years. Most physicians believed that the employment of the Blue Plans in an administrative capacity would lessen the confusion and delays that might be experienced in the transition period during which beneficiaries were being transferred from their old coverage or being enrolled anew. By this time, the profession had expressed a strong preference for payment on the basis of

UCPR fees. The National Association of Blue Shield Plans was already advocating payment on this basis for its national accounts and urging the individual plans to put it into effect in their other underwriting. This conformity of views also had its effect in persuading physicians to support utilization of the Blue Shield Plans wherever possible in the operation of federal health programs.

The final, and perhaps most significant factor in the adoption of this policy by the profession, was the belief that the Blue Plans were receptive to the thinking and wishes of physicians since, after all, the medical profession had majority representation on the boards of directors of most plans. Physicians have always had an almost atavistic distrust and fear of government intrusion into any aspect of medical practice. Perhaps subconsciously they hoped that the Blue Shield Plans would be an effective buffer between them and government.

These hopes of the medical profession were unrealistic to some extent and, as a result, they were not fulfilled. Since the Blue Shield Plans are employed an intermediaries, rather than carriers, they administer but have no fundamental role in policy making. While the Blue Plans and other intermediaries do have elaborate committee structures to advise the government, in the final analysis all policy decisions are made by the Social Security Administration and the Department of Health, Education, and Welfare. The influence that the medical societies hoped to exercise over the Title 18 and Title 19 programs, through their close association with the Blue Shield Plans, has therefore proved to be illusory.

Program administration by intermediaries is itself subject to certain inherent disadvantages. On a national scale it is cumbersome, since the Social Security Administration must relate and adapt to a large number of carriers which vary greatly in their methods, capacities, and sophistication of equipment. In addition, the SSA, after raising Part B premiums by 33⅓ per cent on one occasion, recently averted another increase only by making several administrative adjustments. Although the SSA has publicly announced its satisfaction with the performance of the intermediaries, many in government, for these and other reasons, consider this type of operation to be ineffective.

The health insurance companies are dissatisfied with the difficulties and restrictions that the intermediary variety of administration has imposed on them and they have been pressing for a

true carrier relationship with the program. They believe that this would simplify their operations and normalize their relationships with paying agencies, subscribers, and physicians. The Department of Health, Education, and Welfare has so far resisted making this change and there is mounting speculation that, at some time in the not too distant future, the intermediaries may be eliminated and the entire operation shifted to Baltimore.

The Committee feels that the elimination of the voluntary and commercial carriers would be unfortunate and recommends that the Association exert what influence it can for their retention. Nevertheless, it must be borne in mind that in their present role they have limited decision-making capacity and cannot negotiate directly with providers of services or their organizations. Present attempts by medical societies to modify the Title 18 program are therefore indirect, unwieldy, and generally unsatisfactory. In addition, if government should decide to take over the operation of the Title 18 program entirely, the Association would find itself without any established channel of communication with the administrators of Medicare and possibly other future federal programs. It has become clear that what Medicine hoped to use as a buffer between itself and government has become an insulator. The Committee is of the opinion that such insulation is undesirable and that all medical societies should seek to establish and maintain open, direct channels of communications with the agencies that set policy for government health programs.

Public Law 89-97 is also having a major effect on voluntary health insurance programs, which is of interest and significance to the Association. Although the concept of limiting health insurance to catastrophic coverage has disappeared almost entirely from voluntary health insurance, Blue Shield programs still have substantial limitations of benefits and often fall far short of providing full reimbursement for medical care costs. Through Medicare, the elderly now enjoy, or can enjoy, a wider spectrum of benefits and a higher level of reimbursement than are normally available through voluntary programs. Medicaid, in spite of exclusions, restrictions placed on federal contributions, and frequently substandard reimbursement for suppliers, still requires that the indigent ultimately be given a complete range of supplies and services at no cost to them.

Since public and private programs exist side by side, comparisons are inevitable. They have not been flattering to the plans offered by voluntary carriers and have led to demands by both

labor and management that the plans greatly increase their benefits. Unfortunately, the voluntary segment of the health insurance industry is being called on to match the generosity of the federal, state, and local governments at the very time that health care costs are rising most steeply and public resistance to premium increases is at a maximum. Caught between these two pressures, the Blue Plans will continue to run behind public expectation, which will augment the clamor for more government supported programs. If the populace is not offered voluntary coverage that is reasonably comprehensive at premium rates that are not excessive, they will turn to government administered, tax financed programs. Even if their benefits are provided predominantly through prepayment programs which limit their choice and prohibit a person-to-person relationship with their physicians, they will sacrifice these features to minimize or eliminate out-of-pocket payment. This is a challenge the voluntary health insurers must meet and they are hampered in their efforts by behavior patterns they have established. In the past, Blue Shield Plans have been generally unimaginative in devising new benefits and have extended their coverage into new areas of health service only under consumer pressure. Policies have too often been tailored to the premiums that could be charged without regard to whether they met basic minimum requirements. Such marketing practices are no longer appropriate in dealing with sophisticated, well-informed and critical consumer groups, but they are being abandoned slowly and reluctantly.

The National Association of Blue Shield Plans (NABSP) apparently recognized the threat posed by these deficiencies. In October 1968, at a special meeting, its membership standards were made more stringent by requiring its member plans to make paid-in-full programs, based on usual, customary, and prevailing rates, available to their subscribers. This is an encouraging step toward the goal of more complete reimbursement of subscribers for their health care expenditures. It should logically be followed by efforts to move the individual plans toward upgrading their benefits in terms of the range of services they cover. The Association, through its recently formed liaison committee with the NABSP, should encourage and stimulate further progress along these lines.

The reason for the creation of the Association's liaison committee with the NABSP calls for one more comment. For a variety of reasons, some Blue Shield Plans have been showing a tendency to deal directly with the physicians in

their area and to circumvent the medical societies that represent those physicians. This tendency found expression in the policy which was adopted at the 1967 annual meeting of the NABSP and which led to the formation of the liaison committee. The Committee is of the opinion that, at this time, when the entire system of providing and paying for health services is under critical public appraisal, the relationships between the medical profession and the Blue Shield and Blue Cross Plans should be close, cordial, and cooperative. In most Blue Shield Plans, the medical profession has majority representation on the board of directors. These board members are direct links between the plans and the societies that corresponds to them. The medical societies would do well to reexamine their representatives at this time to insure the effective exercise of their policies and their influence.

As far as Blue Cross is concerned, the influence of the medical profession is considerably less pronounced. Nevertheless, an effective strengthening of ties between the medical societies and their corresponding Blue Cross Plans is desirable at all levels. The Committee knows of no liaison groups with the Blue Cross national organization that would correspond to that with the NABSP. Since many of the Association's concerns and interests in health care are directly related to the financing of hospital services, the establishment of such a committee would seem to be indicated.

To summarize this topic, the Blue Shield Plans are changing in their fundamental nature in response to pressures from government, from consumers and from the Blue Cross Plans with which they are associated. Their dependence on the medical profession has diminished, and they are generally less responsive to the opinions and the guidance of the medical societies. The loosening of ties is further aggravated by the long tenure of most of the medical members of the boards of directors who, having outgrown their society ties, no longer reflect current medical policy and often fail to alert their medical societies to changes in Blue Shield operations and their significance. The stresses to which our health care system is currently being subjected call for new and imaginative approaches to the utilization and distribution of our total pool of resources in terms of manpower, facilities and money, if voluntary systems are to survive. Blue Cross, Blue Shield, and the Association all have a vital interest in voluntarism in health care. That joint interest calls for them to close ranks and coordinate their efforts and their planning.

HOUSE OF DELEGATES / Continued

The Committee therefore *recommends*:

(1) That the Association, through its current liaison with the NABSP, seek the obtain continuous and current information on the Medicare Program; that it secure data on the development of additional benefits, new fields of coverage, and minimum standards of benefits in voluntary plans; and that, through the NABSP, it stimulate the Blue Shield Plans to greater efforts in upgrading their programs.

(2) That a similar liaison committee be developed in conjunction with the Blue Cross National Association for similar purposes.

(3) That the AMA advise state and county medical societies to take similar action at their respective levels and to review their representation on the boards of directors of their local Blue Plans to be sure that their representatives are individuals who are currently active in society affairs and familiar with society policy.

(4) That the Association seek a formal and direct channel of communication with the Department of Health, Education, and Welfare, with the object of developing its own capacity for modifying existing and new programs when such modification is indicated, rather than relying solely on the NABSP for this purpose.

PRIORITIES OF HEALTH SERVICES

In earlier portions of this report, reference was made to an increasing demand for "comprehensive" or "patient-oriented" health care. The parameters of such care have been described only in generalities and nowhere has the Committee been able to find an authoritative definition of the word "comprehensive" as it applies to health services. Since the principle of comprehensive care has been generally accepted, it is important to determine precisely what services represent minimum acceptable and optimum levels. If the resources are available to supply all services representing optimum care simultaneously and immediately, there is no major problem. If, on the other hand, those resources are not on hand, it becomes necessary to evaluate all services in terms of their importance, urgency, and cost effectiveness, and to establish minimum standards and priorities on that basis.

The following is a partial, cumulative list of services advanced as essential elements of optimum health care, culled from a number of sources:

(1) Necessary care for all acute illnesses, somatic or mental, of high quality, immediate avail-

ability, and rendered in a suitably equipped facility.

(2) The same care for chronic illness without limitation of time or cost.

(3) A program for the continuous monitoring of health, growth, and development from birth to adult life.

(4) Periodic, regular health inventory of adults to prevent disease or detect it in its early stages.

(5) Periodic and regular evaluation of mental health.

(6) A formal program of health counselling to function in conjunction with 3, 4, and 5 above.

(7) Disease and accident prevention programs.

(8) Occupational counselling based on appraisals of the individual's background, attitudes, aptitudes, and aspirations.

(9) Social service counselling for domestic, behavioral and environmental problems.

(10) A healthful environment in terms of housing, control of air and water pollution, sanitation, noise abatement, transportation, education and civil rights.

(11) Central maintenance of complete and readily retrievable data on each individual.

HEALTH BILL OF RIGHTS

It seems almost self-evident that a program for more or less complete health services as described above is not immediately possible, even for selected population groups. The Committee therefore recognizes a need for the identification of both short-term and long-term goals in health care for all individuals, possibly in the form of a "Health Bill of Rights." Such a statement, coupled with accurate data on existing human and material resources, would be of inestimable value in planning public programs that are realizable, effective and make most advantageous use of money, facilities and manpower. The statement would also serve as a yardstick to measure the adequacy and the progress of voluntary health insurance programs.

The Committee therefore *recommends* that:

(1) An appropriate committee or division of the Association gather information from the state medical societies on the availability of physicians, ancillary personnel, hospital beds in all categories, laboratories, public health nurses, social service workers, and all other types of health professionals.

(2) The Association promulgate a "Health Bill of Rights" to identify the services that comprise comprehensive health care.

(3) On the basis of the data obtained from the state medical societies, the Association establish minimum standards for health care and a system of priorities for the provision of services beyond those minima, thus creating both an immediate and a long range schedule for their attainment.

(4) The Bill of Rights, the data and the standards and priorities receive wide publicity.

HEART DISEASE, CANCER, AND STROKE—PL 89-239

Public Law 89-239, known as the Heart Disease, Cancer, and Stroke legislation, established and funded regional medical programs. On a nationwide basis, these programs are off to a patchy start. In some sections of the country, medical educators are actively perfecting methods of rapidly disseminating the information derived from research with the object of reducing the time between the discovery or development of new principles, theories and techniques and their clinical application. Even this early in their development, these local programs promise to become the most important single vehicle for the coordinated instruction of practicing physicians through radio, television, and mail or direct testing and education sessions. Many such programs have created channels of intercommunication to supplement or enhance the scientific content of their material and improve their didactic methods.

In other areas, progress has been disappointingly slow. This has in part been due to the fact that some medical school deans, exercising a disproportionate degree of control over the Regional Medical Programs, have been reluctant to allow projects in postgraduate education to dilute the purity of their graduate teaching and research efforts.

In spite of the unevenness of its growth and development, the program as a whole has great potential and it merits the continued interest and support of the Association and the constituent and component medical societies.

PARTNERSHIP FOR HEALTH—PL 89-749

One more item of recent health legislation deserves comment here since it may eventually have a profound influence on medical practice. Public Law 89-749 provides federal matching funds for the development and operation of Health Planning Commissions under which the state and regional agencies for comprehensive areawide health planning will function. In some areas, where good relationships prevail among local government, the health professions, voluntary health agencies, community groups, and the regional hospital planning council, their organiza-

tion is proceeding briskly. In other regions, planning agencies are not being formed because of bickering among these groups, each anxious to secure the planning function as its own exclusive property.

In many localities, officials of the various departments involved in the provision of health services are not accustomed to dealing with professional societies, the voluntary health agencies, and community groups. Some see community-based planning agencies as a threat to their own authority and their empires. The local government, in these instances, attempts to gain control of the planning council and exercises its veto power over other proposals for agencies with wide community representation.

It appears to be the intent of the law that consumers, or the public, play a substantial role in planning for their own health care. The law specifies, in rather loose terminology, that either the directors of the planning agency or its advisory council must have at least 51 per cent consumer representation. Many consumer and community groups do not yet have individuals to represent them who are experienced, well informed, and have the vision to look beyond immediate factional interests. Such representation takes time to develop and its lack will delay the achievement of effective planning. Nevertheless, the intent of the law is clear and these groups should be incorporated into the planning commissions and encouraged and assisted in every way.

It is hardly necessary to add that the voluntary health agencies and the professional societies can contribute much specialized knowledge and expertise in planning for health. They should be amply represented on the *executive* bodies of the regional health planning councils.

As presently projected, the planning councils will have no direct authority. They will merely study, plan, and advise. Since they will be planning for health in the broadest possible sense, they will be faced with an awesome array of problems. The programs and plans they develop to solve these will depend for implementation on the administrations, government agencies, and officials of several jurisdictions, who may or may not cooperate with the planning body or each other. It appears likely that the early stages of the comprehensive areawide health planning councils will show some degree of confusion, disorganization and ineffectiveness, both in planning and execution. Nevertheless, as the population density increases, coherent environmental planning is becoming an absolute necessity and some means will have to be found to minimize dissension and either encourage or require the

HOUSE OF DELEGATES / Continued

various legitimately interested groups to cooperate with one another in the general interest. The only body with the requisite authority to do this under the provisions of PL 89-749 is the state health planning commission. Many such commissions have refrained from exercising that authority to the detriment of their programs.

To date, PL 89-749 has had little effect on the public or the health professions since the programs are not well advanced. The Committee is of the opinion, however, that this law will have the most far-reaching consequences as the planning councils mature and reach their full power. Planning agencies are generally ineffective unless they have the authority to impose their programs on those who must put them into effect. That was the experience with many regional hospital planning councils which, originally limited to advising officials and departments of government, were given direct control over hospital modernization and construction. The areawide comprehensive health planning councils will probably go through the same evolutionary process. If they do, in all likelihood they will absorb the regional hospital planning councils and the regional medical programs. Public Law 89-749 would then become the umbrella law under which all health services would be planned, programmed and coordinated. The implications of this law to the health professions is clear.

The concepts underlying areawide comprehensive health planning are too well known and accepted to require discussion in this report. The Committee does, however, wish to direct the Association's attention to the manner in which the medical profession, through the medical societies and the AMA, should relate to the planning councils and the planning effort. There are several points to be made:

(1) The medical societies at all levels should support the concept of PL 89-749 and aid in every way possible to establish properly constituted planning agencies.

(2) The medical societies should actively support and promote the establishment of areawide comprehensive health planning agencies, at local levels, that have broad community representation *on their boards of directors*, in contradistinction to their advisory committees or councils. It is inadvisable to permit local governments, composed as they are of elected and appointed officials of varying capability and tenure, to dominate or control health planning.

(3) State and county medical societies should seek or, if necessary, demand their proper rep-

resentation on the *executive bodies* of the planning councils. The societies should not accept a purely advisory function.

(4) To this end, the state medical societies should make every effort to inform physicians and county medical societies of the details of PL 89-749, the role they should seek in areawide planning, and their legal recourse if they are not accorded proper representation.

The Committee therefore *recommends*:

(1) That the Association request the state medical societies to submit information on the status of comprehensive areawide planning in their states and the problems that are being encountered.

(2) That this information be analyzed, summarized, and redistributed to the state societies, together with the suggestions made in the preceding paragraphs and a resume, prepared by the Law Division, of the provisions in the law that are pertinent to those suggestions.

(3) That the implementation of comprehensive areawide health planning be reviewed periodically and that the state and county medical societies be advised of the problems and pitfalls in this difficult but important area of endeavor.

PART II

THE NATURE OF THE AMA LONG TERM RECOMMENDATIONS

An analysis of the structure of the AMA and an evaluation of how suitable that structure is to effect the most rapid and complete attainment of the Association's objectives can best be made in the light of a projection of future conditions. Recommendations regarding organization or reorganization must be based on the accurate identification and assessment of the trends, forces, and agencies with which the Association will have to deal effectively if it is to achieve its goals.

SUMMARY OF PROBABLE FUTURE ENVIRONMENT

The prediction of future conditions requires a summary and partial repetition of a number of observations, opinions, and value judgments that have already appeared in this report.

It seems safe to predict that the cost of health services, both per unit and overall, will continue to rise, although not as spectacularly as they have in the past few years. The need and effective demand for services will also multiply and, although the capacity of the health establishment to provide services will expand considerably, it will continue to run behind public expectations and requirements. The interaction of increasing costs, growing demand, and scarcity of services will in-

evitably result in greater government expenditures for health care programs, as well as for capital construction and modernization of facilities. As these sums constitute a progressively larger portion of the budget, they will insure continuing legislative and administrative scrutiny of costs, delivery systems, and the distribution of facilities and personnel. In the private sector these same trends, plus mounting consumer pressure for a more complete spectrum of coverage, will necessitate substantial premium increases; and will also be an invitation to government investigation, intervention, and control. These problem areas are not amenable to immediate or complete solution, and since they have awakened individual and group consumer interest, they will create growing pressure for government financing and for public control of health services, facilities, and planning. Much attention will be paid to the mechanics of delivering health services, the manner in which health professionals are paid, and the levels of their reimbursement.

It is a matter of record that the Department of Health, Education, and Welfare is strongly in favor of some type of compulsory federal program for financing health services. Although the chief exponent of that policy is no longer Secretary of the Department, it would be naive to expect a complete turnabout in philosophy, or to underestimate the forces that will be exerted to bring about a compulsory, federal health insurance system. While cutbacks in the federal budget can be expected to limit the expansion of health care programs of the Medicaid or assistance type, at least for the immediate future, there is no reason why the Department of HEW could not promote a contributory program, once its internal problems with the administration of Medicare and Medicaid have been contained.

In view of the outcome of the 1968 presidential election, it would be foolhardy to venture an opinion on how rapidly government at the federal, state, and local level will increase its financial, organizational, and administrative involvement in the delivery of health services. It would be equally foolhardy, however, to expect a complete reversal of the trend, rather than a mere slowing of the pace.

The ultimate fate of public, or consumer, participation in health care planning, as embodied in the Partnership for Health Amendments, is also difficult to foretell at this early date. There is growing evidence, however, that government health agencies will resist more than token involvement of the public in planning, as they have resisted that of organized medicine. It begins to appear that the so-called Areawide Com-

prehensive Health Planning agencies will be mere reshufflings of the same groups and individuals who are now influential with government health and hospital administrative authorities. If the communities and the medical profession permit this to happen, planning for health services may be dominated or completely controlled by government health agencies and officials. As a consequence, strong pressure would be exerted for the expansion of prepaid group practice while private solo and group practice, based as they are on fee-for-service payments, would become the targets for regulation and fee control. The importance of properly balanced representation of all competent and interested segments of the population on comprehensive health planning bodies is quite clear, since only such broadly based organizations will permit the various health service delivery systems to prove their worth in competition with one another. Specific recommendations on this matter will be made in a later portion of this report. At this time, the Committee merely wishes to identify a trend which may affect the course of medical practice in the future.

It is worth noting that government officials in the health field are frequently unresponsive to the policies, opinions, and advice of organized medicine. Whether or not they succeed in dominating health planning councils, their attitudes and recommendations will be given much weight in the framing of legislation relating to health services. Organized medicine, to counter or contain their effect, will find it necessary to devise ways of exercising its own influence in the formative stages of health legislation. In addition, since health and welfare officials administer government programs, medical societies, at their respective levels, must develop a capacity for prevailing on them to modify their administrative policies and regulations when such modification is indicated.

HOW A PROFESSIONAL ASSOCIATION CAN EXERT INFLUENCE ON LEGISLATION AND ADMINISTRATION

At this juncture, it is pertinent to consider how influence can be brought to bear by an organization such as ours, the points at which it can be applied, and the conditions necessary for it to produce the desired results. It is clear that no medical society or other professional association can be a prime mover in the socio-economics of the health service system, since it can neither legislate in this field nor administer government programs. The Association can therefore expect to exert an effect directly proportional to its capacity for influencing legislation on the one hand,

and the administration of existing programs on the other.

INITIATION OR MODIFICATION OF HEALTH LEGISLATION

With regard to health legislation, there are three useful modalities for the application of the medical profession's influence. The first of these is the *persuasion* of legislators to adopt one particular course or abandon another. Persuasion is usually exerted through the instrumentality of legislative counsel or what is more vulgarly and colloquially known as a lobby. The results achieved by this means depend on the soundness of the Association's recommendations, the persuasiveness and validity of its supporting arguments, and the probable impact of the proposed action on public welfare and public opinion. In addition, the outcome depends on the prestige of the organization and the degree of friendship and respect its representative enjoys among influential legislators. Generally, when the issues in question are highly controversial, persuasion, in its pure form, is ineffective and either gives way or shades off into the second modality, *political pressure*. This can take two forms, the first of which is direct political action intended to affect the outcome of elections for public office. In theory, such action is effective because it can exert a favorable or unfavorable influence on the political careers of individual legislators. The actual impact of political action on legislation is extremely difficult to assess but it must be proportionate to the legislators' appraisal of the weight of support or opposition they may expect as a result of the positions they take on the organization's requests and recommendations. Although political action of this type is neither appropriate nor legal for a tax exempt association such as the AMA, it is both proper and legal for separate organizations of physicians such as the national and state PAC groups.

Political pressure can also be generated by arousing substantial public, i.e., voter, support for one or more of the Association's policies and clearly demonstrating the strength of that support to legislators and public officials.

This leads to the third and final modality, *public relations*, which is not only a principal endeavor in itself but is also a powerful support mechanism for persuasion and political pressure. Ideally, PR programs should create the general belief that the objectives of the Association are unselfish and in the best interest of the public. They should also establish the Association's com-

petence in general and, more specifically, on the issue immediately in question. To the extent that PR programs achieve these goals and enhance the legislators' appraisal of the Association's motivations and effectiveness, they are capable of affecting legislation relating to health care. In addition, insofar as public relations efforts engender popular support for a specific measure advanced or supported by the Association, they augment the effects of persuasion and political pressure for its adoption.

MODIFICATION OF PROGRAM ADMINISTRATION

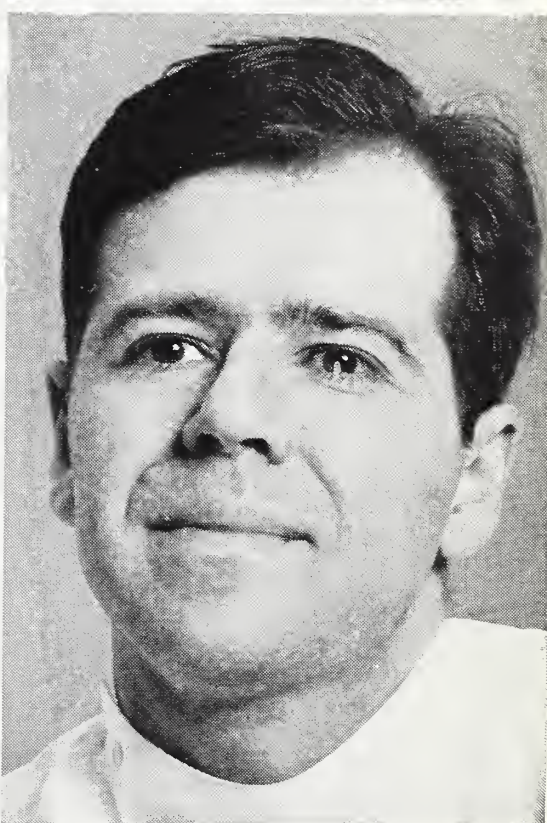
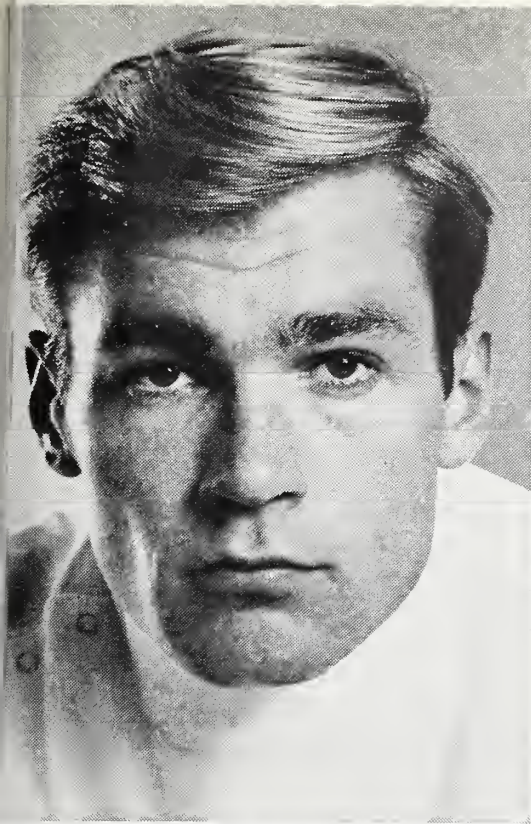
If we turn from legislation to a consideration of how the administration of existing government health programs can be changed or modified, we find that at least one new modality must be added to the Association's armamentarium.

The administrators of public programs are usually health or welfare officials who are appointed rather than elected, and who are therefore not amenable to direct political pressure. It is true that this type of influence can be brought to bear on the elected officials who determine or have ultimate authority over program operation, but experience has shown that it is extremely difficult to achieve desired modifications by this means. Except under very special circumstances, political pressure is not effective in the general area of program administration.

Public relations measures are also of limited value in this particular application. On issues of great importance that are easy to explain to the lay public and that command good coverage by the news and information media, it is possible to raise enough public support to cause appointed officials to modify their regulations, either spontaneously or at the behest of the administration that controls them. Such issues are exceptional, however, and public relations therefore constitutes a weak device for bringing about modifications in government health programs.

Persuasion is the last of our previously discussed three mechanisms and in this area of endeavor it is the poorest instrument of all. Because of the very nature of their motivations, interests, and objectives, there is almost invariably some degree of friction and antagonism between health and welfare officials and the medical societies that correspond to their jurisdictions. With few exceptions, program administrators have proven to be refractory to the arguments, advice, and even to the demands of organized medicine.

Thus, all the mechanisms that are useful in exerting influence over legislation are of limited efficacy, or completely ineffective, when applied



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stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards; they all are underpaid, too. Therefore, all interns are alike.

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You might also say that all interns aren't alike, either.



HOUSE OF DELEGATES / Continued

to the modification of program operation. A new dimension must therefore be added to medical society activities in their relationships with the administrative branches of government. That dimension is *negotiation*.

Negotiation applies to all aspects of program operation including not only professional fees but also the rules, regulations, and procedures that establish the conditions under which physicians render their services. Several factors determine the success of the medical societies in negotiating agreements. The terms and conditions they seek must be justifiable and reasonable as far as fees are concerned, and they must be consistent with the public interest and the interests of the beneficiaries with regard to regulations and procedures. Another extremely important determinant is timing. Administrative modifications must be sought early in the development of a program, preferably before it is put into effect. Ideally, the request for such changes should also be made at a time when their implementation is not politically embarrassing to the administration in power.

Even if they meet all these conditions, however, the medical societies' arguments and requests are rarely accorded serious consideration unless the negotiators can deal from a position of strength. One possible source of that strength is manifest public sympathy for the Association's position. Such support is only rarely attainable because the issues at stake are often technical in nature and of no immediate interest to the public. The principal and basic source of strength for negotiators lies in their being able to demonstrate that they have the backing of the majority of the members they represent and that, on their recommendation, those members will refrain from participating in the program, thereby impairing its usefulness or defeating its purpose. It is both distasteful and self-defeating, however, for a medical society to use threat as a weapon when dealing with matters that impinge directly on the public health and welfare. Recent rounds of wage discussions and strikes among civil service workers, particularly in the State of New York, have made it evident that in the public or private domain, negotiations based on the threat of public inconvenience or peril are intolerable. It would certainly be useless, as well as contrary to the medical profession's tradition, for physicians or their representatives to adopt the trade union "bargaining" approach.

This does not mean, however, that negotiation is useless as a means of promoting or securing

suitable conditions and reimbursement for physicians. It merely means that we must find an alternative to force or pressure to reinforce our claims. The only logical alternative is to establish a climate in which medical associations and government agencies may agree to negotiate with mutual respect and a recognition of the community of their goals. Government has a powerful incentive to establish a smooth and cooperative relationship with the medical profession since physicians are required to implement all health programs and control the utilization of facilities and non-medical health personnel. There is therefore no reason why government should raise obstacles to negotiation once it is convinced that the societies, with the full backing of their members, are prepared to negotiate seriously on the basis of accepted principles and sound data. If this type of relationship is to be established successfully, it will be necessary for the medical societies to create and train groups for that purpose and for counterpart groups or agencies to be formed by government. These must then meet to lay down the principles, ground rules and procedures that will govern their relationship and to define their objectives. The process will take time and it is for that reason that the Committee has emphasized the importance of organizing teams and the urgency of making a beginning.

Physicians sometime have difficulty in understanding why, if the usual, customary, prevailing and reasonable concept is preserved, there should be a need for negotiation. Nevertheless, the fact that they shy away from the term "prevailing" and prefer to omit it from their writings and discussion indicates that there is either a conscious or instinctive recognition that the prevailing fee is actually an unpublished maximum fee schedule which can be set at any percentage of customary fees. It therefore follows that at some time negotiations to set the percentile of prevailing fees will become necessary. The parting remarks of the outgoing Secretary of Health, Education, and Welfare substantiate this belief. If existing medical societies fail to prepare themselves for negotiation, other groups will inevitably take over that function and thereby undermine the societies' membership and influence.

Obviously, the need at the AMA level is not nearly as acute as it is in the lower echelons of medical society organization, but even nationally it is quite conceivable that the Association will find it necessary to make agreements with government on the operation of health programs. That necessity should be anticipated and provided for.

LEGISLATION: ESSENTIAL CONDITIONS
FOR SUCCESSFUL PUBLIC RELATIONS
AND LEGISLATIVE PROGRAMS

Having examined the general mechanics of exerting influence on legislation, the major area in which the Association must function, let us consider how our public relations and legislative experts must be armed and what must be the characteristics of the policies and programs they are required to promote.

The most important single requirement is that the organization they represent be respected for its motivations and purposes. This can happen only if the AMA has a general policy or avowed purpose that is clearly stated, is understood by legislators and the public alike, and is demonstrably in the public interest. The Committee proposed the adoption of such a statement in the first section of this report, i.e.:

"To endeavor, by all appropriate means, to make health services of high quality available to all individuals, in a dignified and acceptable manner, regardless of their ability to pay for those services, the source of the payment, their social status, or their ethnic origin. The American Medical Association has the duty to guide and assist the medical profession in the attainment of this objective."

The adoption of this or a similar statement is the first step toward an action program for the Association. Subsequent policies on more specific issues must also have certain characteristics if they are to be successfully promoted. They should be innovative to the greatest extent possible and should be directed toward solving problems and correcting deficiencies in health care *that have been identified by the Association itself*. They must be based on objective analyses of factual information rather than be subjective and emotional responses to proposals made by officials or legislators. All policy statements must be consistent with one another and with the objectives set forth in the statement of the Association's purposes.

Even if the policies meet all these criteria, however, they will not necessarily be received favorably by legislators. Since it is important to the AMA's public stature that it be associated with as few failures as possible, each of its statements, policies, and actions in the field of health service legislation should be judged by the following four tests:

(1) Is it in the public interest or interpretable as such?

(2) Is it politically advantageous, or at least innocuous, for the legislators to adopt?

(3) Will it have public support or, if contro-

versial, is it likely to have the support of a majority of politically influential groups?

(4) Is it consistent with the previous policies and pronouncements of the Association on the same or similar issues?

The relative weight ascribed to these tests will vary with the issue in question but all are operative to some degree. It is true that from time to time the Association may be impelled to propose a course of action that, while in the public interest, does not qualify for support by the other three criteria. This should be done only in those instances when, after careful deliberation, the importance of the matter seems to justify taking a calculated risk.

It is instructive to examine the AMA's course of action on Medicare in the light of these observations. The Association's opposition was more emotional than objective and was at least partially predicated on an underestimation of the problems faced by the elderly in the financing of health care. In spite of its honest motivation, the Association's position was easily distorted to give the impression that physicians were opposed to the provision of needed aid to the elderly for selfish reasons, obviously not in the public interest. In addition, the AMA's policy did not have the support of a majority of the populace and would therefore have been a liability for any legislator to espouse. About the only criterion it did meet was that of consistency with earlier positions on the same subject.

This is not to say that the policy of the Association at that time was necessarily wrong in the light of the few facts that were then available or that it should not have been adopted. It is merely to point out that failure was predictable. In retrospect, a more useful and practical approach might have been to investigate more thoroughly, accept the principle involved, as we ultimately did, and then act to modify the program as innovators rather than critics and opponents. Since the formulation of sound policy by the organization is the very essence of successful legislative activity, let us now examine the structure of the Association to determine how well it is suited for this function.

STRUCTURE OF THE ASSOCIATION

The AMA is a rather loose federation of fifty state medical societies and the medical societies of the District of Columbia, U. S. Virgin Islands, Canal Zone, and the Associated Commonwealth of Puerto Rico. These societies are known as the constituent or state associations. They are assigned one or more delegates to the House of

HOUSE OF DELEGATES / Continued

Delegates of the AMA in proportion to the size of their memberships. In addition, Scientific Sections of the Association are allotted one delegate each, as are the Armed Services, the Public Health Service, and the Veterans Administration. These members of the House are voting delegates. Other ex-officio members have voice but no vote.

THE HOUSE OF DELEGATES

The House of Delegates is the final authority on all actions and policies of the Association. When it is in session, it acts on all resolutions introduced by member delegates, reports of the Board of Trustees and Standing Committees of the House. Finally, the House of Delegates elects the Officers and Trustees of the AMA. This body is therefore the supreme authority and, if it met continuously, would exclusively govern all of the organization's policies and functions. Since it is not in continuous session, however, it is the major rather than the sole determinant of AMA policy.

The House of Delegates meets twice a year in working sessions of approximately three days, during which time it decides the Association's responses to the important issues and situations it faces. In spite of meticulous advance preparation by staff and an excellent reference committee system, this is too short a time for it to digest, evaluate and act on myriad complex matters, most of which vitally affect the health of the public and the practice of medicine. In the time available, individual members cannot consider each issue that comes before the House in the depth that its importance may require. At the best a delegate can attend one or two reference committee hearings and can therefore become thoroughly informed on only a portion of the issues on which he will be required to vote. The effect of this on the quality of policy making is obvious.

The AMA's essentially political and democratic nature also has an influence on the actions of the House. Aside from staff and appointed committee members, the Association consists of office holders who are elected to represent the entire membership and take action in their name. The delegates are elected by their own state associations, while the Officers and Trustees are elected by the House of Delegates.

If delegates deviate too frequently from positions taken by their state associations, they are likely to lose their support at home and fail to be re-elected. In addition, if they oppose the major-

ity in the House too often, especially on certain vital issues, they may incur the penalty of being denied further advancement in the Association. In either case, they lose the opportunity of continued or increased participation in a field of activity that is of profound interest to them, to which they have devoted much time and believe they can make significant contributions. Under these conditions, they may be swayed to vote as they are mandated or to be influenced by the majority opinion against their personal judgment.

To fully appreciate the factors that shape the policies adopted by the House of Delegates, it is also necessary to understand the characteristics of the delegates themselves, insofar as a complex group such as this can be considered to have group characteristics. In general, most of them have successful practices with patients derived from the middle and upper income brackets. The majority tend to be conservative in their political and social philosophies and, almost without exception, are deeply concerned with preserving the traditions of their profession and their time-honored relationships with their patients. They therefore resent criticism of present methods of rendering medical care and programs that permit individuals or agencies to intrude between them and their patients.

These characteristics must be equated with current trends if the reactions of the delegates are to be fully understood. The public and the various legislatures, spurred by the enormous strains created by the disparity between limited health facilities and personnel and unprecedented increases in demand, are inclined to place great emphasis on such considerations as cost, quality of services, and the logistics of delivery. They are attempting to control these factors by intervening more frequently and more directly in the planning and regulation of health care, often to the exclusion of medical and other health professional associations.

Under these circumstances, issues in the socio-economics of health care and the organization of delivery systems for health services have a high emotional content for the delegates. The House has on occasion reacted to matters of this nature in a reflex fashion, rather than deliberately, with considered and dispassionate judgment. As a result, positions have been assumed that were inconsistent with the medical profession's overall objectives and that were widely misinterpreted as being a guild type of response motivated by selfish interests. The adoption of such policies traumatizes the Association's public relations and dilutes the effect of its legislative activities. The



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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications** are listed above. **MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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First choice

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*When ephedrine is too exciting
or is contraindicated*

MUDRANE GG

*During pregnancy or when K.I. is
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MUDRANE GG-2

A counterpart for Mudrane-2

MUDRANE GG ELIXIR

*For pediatric use
or where liquids are preferred*

*Clinical specimens
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86% greater risk of angina pectoris,
82% greater risk of diabetes,
71% greater risk of coronary heart disease.*

Obesity may also aggravate osteoarthritis, flat feet, intertriginous dermatitis, varicose veins, and ventral or diaphragmatic hernias.¹⁻³

If you are considering weight reduction, consider

Preludin[®]

phenmetrazine hydrochloride
Endurets[®]
prolonged-action tablets

Often effective

Controlled studies in a general patient population have shown that when Preludin is used with diet, the rate of weight loss exceeds that obtained by placebo and diet.

Long acting

Slow, even release of the active principle usually suppresses appetite continuously for about 12 hours.

Once-a-day dosage

One Endurets tablet after breakfast. It helps reduce weight and costs, conveniently.

For contraindications, warning, precautions, and adverse reactions, please see the full prescribing information.

It is summarized on this page.

Where there's no will there's a therapeutic way.

*Among persons 20% or more overweight as compared with median weight for persons of like height and sex.

1. Kannel, W.B., et al.: *Circulation* 35:734, 1967.

2. Thomas, H.E., Jr., et al.: *Med. Times* 95:1099, 1967.

3. Albrink, M.J., in: Beeson, P.B. & McDermott, W. (eds.): *Cecil-Loeb Textbook of Medicine*, ed. 12, Phila.: W.B. Saunders Co., 1967.

Preludin[®]

phenmetrazine hydrochloride

Preludin is indicated only as an anorexigenic agent in the treatment of obesity. It may be used in simple obesity and in obesity complicated by diabetes, moderate hypertension (see Precautions), or pregnancy (see Warning).

Contraindications: Severe coronary artery disease, hyperthyroidism, severe hypertension, nervous instability, and agitated prepsychotic states. Do not use with other CNS stimulants, including MAO inhibitors.

Warning: Do not use during the first trimester of pregnancy unless potential benefits outweigh possible risks. There have been clinical reports of congenital malformation, but causal relationship has not been proved. Animal teratogenic studies have been inconclusive.

Precautions: Use with caution in moderate hypertension and cardiac decompensation. Cases

involving abuse of or dependence on phenmetrazine hydrochloride have been reported. In general, these cases were characterized by excessive consumption of the drug for its central stimulant effect, and have resulted in a psychotic illness manifested by restlessness, mood or behavior changes, hallucinations or delusions. Do not exceed recommended dosage.

Adverse Reactions: Dryness or unpleasant taste in the mouth, urticaria, overstimulation, insomnia, urinary frequency or nocturia, dizziness, nausea, or headache.

Dosage: One 25 mg. tablet b.i.d. or t.i.d. Or one 75 mg. Endurets tablet a day, taken by mid-morning.

Availability: Pink, square, scored tablets of 25 mg. for b.i.d. or t.i.d. administration, in bottles of 100 and 1000.

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(B)R3-46-560-B

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HOUSE OF DELEGATES / Continued

periodic occurrence of this type of reaction, however, is almost inevitable, given the composition of the House and the nature of its operation.

THE BOARD OF TRUSTEES

In order that the Association may function between the sessions of the House of Delegates, a fifteen member Board of Trustees is given interim powers. Twelve Trustees are elected by the House of Delegates, in annual groups of four, for three year terms. The other three voting members are the President, the President-Elect, and the Immediate Past President.

By the nature of its powers and responsibilities, the Board of Trustees exerts a second and potent influence on the formulation of policy, in spite of the fact that its decisions are technically subject to ultimate ratification by the House. The Board meets periodically to act for the AMA on routine matters and on special call of the chairman to decide more urgent and immediate questions. As background, the Trustees have a constant flow of information and reports from the Councils, Committees, commissions, and divisions, and they usually have sufficient time for thorough exploration of issues before taking action. In this they have some advantage over the House of Delegates in policy making.

The Trustees, however, share the general characteristics of the delegates as far as political and social philosophy are concerned. In addition, the Board, in its interregnum, cannot help but consider and be influenced by the probable attitude of the House of Delegates on its actions. This concern is reinforced by the political reality that twelve of the Trustees, or as many as are eligible, are re-elected by the House, on the nomination of the delegations from their home state societies.

A final determinant of the nature of the Board's actions and policies lies in the internal relationships and balances of power among the individual Trustees. These, of course, are impossible to categorize or measure, but the extent of their effect becomes apparent from time to time.

THE PRESIDENT

The office of the President is a third source of policy determination for the Association. Since the President is elected for a term of one year, it is rare for him to make a major change in the organization's directions and goals, though he could conceivably do so by exerting enough leadership to prevail on the Trustees and the House of Delegates. On the other hand, the President is generally considered to be the spokesman for the

Association and although by custom and tacit agreement he usually adheres to the positions taken by the House and the Board of Trustees, he is under no compulsion to do so. He is subject to no external influence and, since he is a free agent in enunciating his own beliefs and principles, he can exert an appreciable effect on the Association's policy from the public relations standpoint, especially if he departs from previous positions the AMA has taken. Finally, of course, the President does have the additional influence of being one member of the fifteen member Board of Trustees.

THE EXECUTIVE STAFF

It is traditional for executives of an organization such as ours to disavow any desire to play a role in policy making. There is, however, no question that the Executive Vice President and, to a lesser extent, the Assistant Executive Vice President, can have a profound influence on the process. The magnitude of that influence depends on the motivations of the individuals, the nature of their relationships with each other and with the Officers, Trustees, and the House of Delegates, their leadership qualities, and their aggressiveness. Since they usually have tenure over a number of years, they have the opportunity to be influential in decision making without overtly over-stepping their authority. Again, the precise determination of the importance and effect of so impalpable force is impossible, but no student of the AMA's history can doubt its existence and potential.

It is evident, therefore, that the AMA's policies come into being as the result of a constant interplay of the authorities and decisions of four separate groups or individuals, rather than from a single source. This decentralization of function introduces an element of uncertainty and inconsistency into the Association's position statements.

Many statements about the Association, emanating from the news media, labor unions, economists, and even some physicians, attest to a belief that the AMA places the financial welfare of its members above the interests of the public. Similarly these same sources have branded the AMA as reactionary and of having purely guild objectives. Ill-founded though they are, the mere existence of such attitudes hampers the organization in the attainment of its legitimate goals. At this point therefore it is appropriate to decide whether the AMA can reverse these public opinions and meet its obligations to its members and the public as it is presently organized, or whether it must undergo a fundamental alteration in structure.

The
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of

Obesity Oddities

FACT & LEGEND

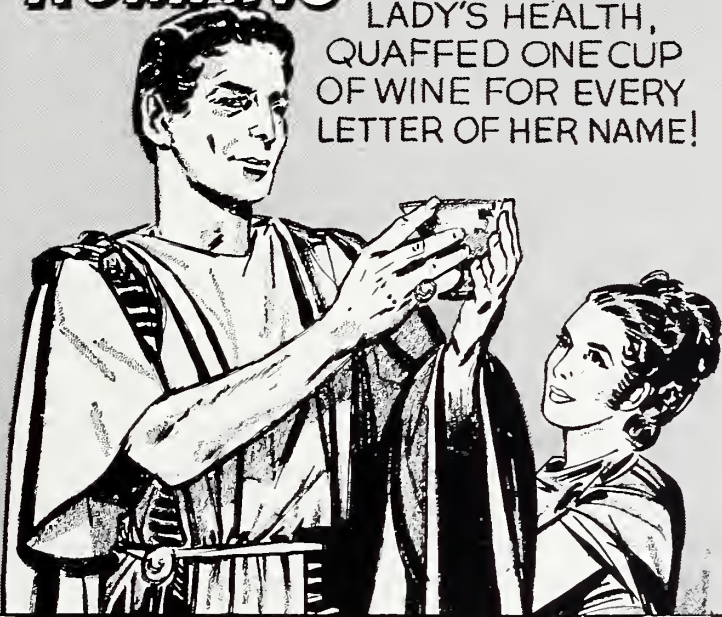
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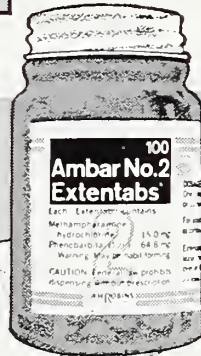
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QUAFFED ONE CUP
OF WINE FOR EVERY
LETTER OF HER NAME!



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DISCOVERED
FAT PEOPLE ARE FAR
MORE APT TO DIE
SUDDENLY THAN
THIN PEOPLE!



THE COST OF AMBAR EXTENTABS

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LESS THAN THAT OF OTHER LEAD-
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**AN IMPORTANT FACTOR
IN LONG TERM THERAPY**



Control food and mood
all day long with
a single morning dose

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EXTENTABS[®] methamphetamine HCl 15 mg.,
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(Warning: may be habit forming).

One Ambar Extentab before break-
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gently elevates mood and helps
overcome dieting frustrations. Phen-
obarbital, the sedative in Ambar,
controls irritability and anxiety...
helps maintain a state of mental
calm and equanimity. Both work to-
gether to ease the tensions that
erode the will power during periods
of dieting.

BRIEF SUMMARY/Indications: Am-
bar suppresses appetite and helps
offset emotional reactions to dieting.

Contraindications: Hypersensitivity
to barbiturates or sympathomimetics;
patients with advanced renal or
hepatic disease. **Precautions:** Ad-
minister with caution in the presence
of cardiovascular disease or hyper-
tension. **Side Effects:** Nervousness
or excitement occasionally noted,
but usually infrequent at recom-
mended dosages. Slight drowsiness
has been reported rarely. See pack-
age insert for further details.

Also available: Ambar #1 Extentabs[®]
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10 mg., phenobarbital 64.8 mg. (1 gr.)
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HOUSE OF DELEGATES / Continued

MANAGEMENT SURVEY

The Committee was aware of the management survey being conducted by the firm of Cresap, McCormick and Paget. At the time of this writing, its preliminary report has just been distributed.

As anticipated, the report does not call for a fundamental or drastic reorganization of the Association. It is interesting to note, however, that the survey team, as the Committee has done, identifies the weaknesses inherent in a division of responsibility and authority in policy making and programming. The report emphasizes the necessity for centralized planning in accordance with established priorities, again a matter of major concern to the Committee. Finally, the definitions of the Association's aims and objectives, as developed on pages 10 and 11 of the preliminary report, are in general agreement with the Committee's own thinking and recommendations.

The Committee does not at this time wish to comment further on the preliminary survey report. Knowing that a professional management study was in the process, and assuming that the consultants would concern themselves chiefly with the administrative branch of the Association, our group saw no reason to evolve its own recommendations on internal administrative balances. It preferred to place emphasis on the Association's external relationships with various segments of the public and with the constituent and component medical associations.

Furthermore, since both the current management survey group and the previous survey committees of the Board of Trustees have devoted considerable attention to the number of councils, commissions, and committees and the duplication of some of their activities, the Committee on Planning and Development refrained from going over that ground again. This report and the management study report therefore have different orientations but, in the few areas in which they overlap, there is no fundamental conflict in the recommendations made.

CONSIDERATIONS FOR AND AGAINST STRUCTURAL REORGANIZATION OF THE AMA

The diminution of effectiveness imposed by the Association's democratic and political nature was discussed earlier in this report. Any plan for reorganization designed to eliminate these deficiencies, however, would of necessity curtail or eliminate the autonomy of constituent associations, proportional representation and majority rule in the House of Delegates, and the priv-

ilege of free expression in an open forum. These positive values, which are basic elements of the Association's present structure, would be difficult or impossible to duplicate in any other system. The Committee is of the opinion that it is important that they be preserved. It therefore seems necessary to accept some of the penalties of our present organization and to minimize them, insofar as possible, by improved operations and more effective working relations with the constituent medical associations. This does not preclude the adoption of the recommendations of the management survey team or rearrangements of the administrative staff and reallocations of responsibility.

The Committee therefore *recommends*:

That the present structure of the Association be retained and that it be strengthened by improvements and modifications in its function.

CHANGES IN ASSOCIATION ATTITUDE

Improvements in the AMA's performance will require that it alter its approach to the public and to its constituent associations. At the risk of being repetitious, the Committee would again emphasize that the Association must abandon its public and exclusive support for existing delivery systems and avoid use of the terms "private practice," "fee-for-service payment," and "free choice." The Committee is keenly aware of the virtues of many of our present methods of practice but their importance has not yet been proven to the public. Arguments directed toward establishing what has become almost a medical mystique fall on deaf ears in an era when a substantial number of our population depend on government assistance to buy health services and must, with the benefits provided, compete with other segments of society for services that are costly and in short supply. Until and unless the Association addresses itself publicly, actively, and objectively to the resolution of the very concrete problems that exist in health care, its attempts to justify present delivery systems and payment mechanisms will be incomprehensible both to the public and government and will be interpreted as self-seeking on the part of the profession. The Association can and should strive to preserve those features of medical practice that it considers important, but the justification for so doing must be based on proofs of value that are meaningful to the lay public. To this end, it has already been recommended that the Association actively identify problem areas in health care and make positive and realistic recommendations for the achievement of immediate and long range improvements.

THE ASSOCIATION'S ATTITUDE TOWARD THE CONSTITUENT ASSOCIATIONS

Within the limitations of the AMA's Constitution, Bylaws, and ethics, the state medical associations are completely autonomous. This autonomy, coupled with the fact that the members of the House of Delegates, which is the ruling body of the organization, are elected by the constituent societies, has made the AMA hesitant in offering positive action programs and suggestions on reorganization to the states. Nevertheless, the state associations do need expansion and reorganization along lines that will be developed later in this report and the AMA must assume the leadership in bringing it about.

The recommendation has appeared repeatedly in this report that the Association gather data from the state and county societies on one aspect or another of health care with the purpose of identifying problems and formulating recommendations for their solution. The point has been made that all medical society activities, at the national, state, and local level, are dependent on accurate information and statistics on all factors influencing health care. At the 1968 Clinical Convention, the House adopted a resolution mandating the Board of Trustees to expedite and expand programs, and where necessary, to create new ones to analyze health care costs and expenditures and to disseminate the data so collected. This was directed at administrative costs, only one small facet of the total problem, but it did represent the recognition by the House of the Association's need for data.

Studies of the type called for in the resolution can be accomplished in one of two ways. They can be purchased from management consultant organizations on a fee-for-service basis, or they can be self-conducted. For the general purposes of the AMA, the management consultant route is excessively costly and is of limited value because studies conducted in this manner are directed toward a single issue and, even then, are episodic rather than continuous. The only advantage offered by survey team studies is that they are deemed to be objective and uninfluenced by the interests of the profession. They certainly cannot begin to provide the constant, current, and comprehensive substrate of information that the Association requires. The second alternative is for the AMA itself to conduct one or more studies from headquarters. Since it is not presently organized to do so, it would have to establish a data center and send out research teams to individual states and regions. Either the costs of such an endeavor would be prohibitive or it would fall short of its purpose.

The most effective and least costly means of accumulating data on a continuous basis would be to utilize the personnel and facilities of the state and county medical societies which would have to be organized for that purpose. This would not be as difficult as it might seem at first glance. State and local medical societies have demonstrated a growing awareness of the necessity for involving themselves more deeply in the investigation and planning of health care. It is significant that some of the larger medical societies have already formed divisions for research into the fundamental problems of the socio-economics of medicine, medical education, and environmental factors that affect health. The current climate will probably make medical societies at lower echelons receptive to the concept of investing significant amounts of money and time for this type of social research, especially if their efforts are coordinated through a central agency. Those states that have too small a membership to do this alone could join forces on a regional basis to achieve these ends.

In any event, properly organized, the societies would form a nationwide network devoted to data accumulation and analysis. The Association's function should be to promote the formation of these resources and to establish uniform standards as to the manner in which data are accumulated, reported, and forwarded. Even those county and state societies that are most jealous of the prerogatives and autonomy will recognize the advantages offered by this course of action and will not consider it an invasion of their rights.

An obvious corollary to this thesis is that the AMA must become more aggressive in its leadership and work actively to create and coordinate the facilities and capabilities of these units of organized medicine so that they may serve a group function while retaining their individual identities and purposes. In essence, the AMA must become a much tighter and more effective federation than it has been hitherto and the stimulus for such reorganization must be applied from above downward.

The Committee therefore *recommends*:

(1) That an immediate survey be conducted of the state medical societies and, through them, of the component county medical societies to determine what arrangements they have made, if any, for the regular collection of data on the socio-economics of health care.

(2) That, on the basis of the information received, the AMA develop tables of organization for research divisions at the state levels and methods of participation for county societies that

HOUSE OF DELEGATES / Continued

are in keeping with their resources. The planning should be developed along lines that are compatible with the concept of a tight federation of societies and are least disruptive to research divisions that are already in existence.

(3) That the plans and tables of organization in their initial form be circularized among the state and county medical societies with the reasons for their development and strong recommendations for affirmative action.

(4) That the association hold a series of working meetings with state and county medical society executives, individually or in groups, to further refine the organizational patterns and procedures that will best serve them in this collective endeavor.

The mere possession of information is not tantamount to wisdom, however. When this reorganization is accomplished or while it is being carried out, the AMA must establish an internal mechanism for analyzing data, identifying problems, and recommending policy. The Board of Trustees could be responsible for this function, although it is doubtful that the Board could, with all its other duties, devote enough time to it. The Committee is of the opinion that a planning council, divided into committees for the various fields of inquiry, would suit the purpose better. The planning council would be required to report and make recommendations to the Board of Trustees and the House of Delegates.

The Committee therefore *recommends*:

That on implementation of the program for organization and reorganization, a planning council with appropriate subcommittees be formed for the purpose of processing data and formulating policy recommendations for the consideration of the Board of Trustees and the House of Delegates.

ACADEMY OF THE PROFESSIONS

If all the recommendations in the foregoing portion of this report were implemented successfully, the AMA would find itself in a greatly improved position to discharge its responsibilities. It would be possible, therefore, and might be prudent to conclude the report at this point. The Committee, however, is influenced by the knowledge that, even with the proposed improvements in communication and function, the Association would continue to suffer from an adverse public appraisal that would hamper its efforts and might take years of assiduous public relations to overcome. In addition, since the Association represents a single health profession, it would prove

unequal to the task of formulating policies and programs for the multiple disciplines involved in health care as the Committee has defined it. The AMA could therefore still not assume the role that was claimed for it in the planning and development of health services:

"That the AMA adopt an active role and take the initiative in developing *all* plans and programs for health care in *all* their ramifications, and that it encourage and assist the state and county medical societies to do the same at their respective levels."

If the Association were to attempt to meet the above objectives as a single organization, the data and deductions arising from its self-conducted studies, although they might be entirely accurate and objective, would still, in the public eye, bear the stigmata of professional prejudice and self-seeking. The volume and range of the data would be limited in spite of the participation and cooperation of the constituent and component societies, unless a prohibitively large and costly surveying agency were established. Finally, as a result of the complexities of modern health care, the policies evolved would, of necessity, require a number of professions, disciplines, and agencies for their implementation. These groups would be unlikely to accept or take affirmative action on policies they had no part in developing. The AMA has recognized the advantages of coordinating its efforts with those of other professional associations but has not been able to bring those associations under the umbrella of its leadership. The liaison committees and other arrangements that it has created to improve communications and bring about cooperation with other professional organizations have been unsatisfactory at best and have not resulted in the necessary multi-professional approach to the direction of health care. It is quite apparent that no single professional group can influence the public or government on any aspect of health services, not even on those that most vitally affect it individually. The health professional organizations together, on the other hand, could have a very weighty influence. It therefore seems logical for them to unite in a formal organization to play their part in the planning, legislation, and delivery of health services, a goal they cannot achieve individually.

The Committee therefore *recommends*:

That the AMA sponsor, promote the formation of, and participate in, a "National Academy of the Health Professions for Research and Policy."

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...to reduce the hemodynamic "bind" of constipation in congestive heart failure

Constipation in the chronic heart failure patient carries with it the ever-present threat of acute cardiac decompensation while straining at stool. In the already weakened, distended heart, a sudden influx of blood on termination of the Valsalva maneuver is considered to be the mechanism of some of the deaths occurring in these cardiac patients during straining efforts.*



Doxidan is a gentle laxative designed to free your patient from the hemodynamic consequences of straining at stool. With a fecal softening agent to keep the stool soft and easy to evacuate, and with just enough peristaltic stimulation to urge the sluggish bowel, Doxidan reduces the hemodynamic "bind" of constipation.

Composition: Each capsule contains 50 mg. danthron N.F. and 60 mg. dioctyl calcium sulfosuccinate.

Dosage: Adults and children over 12—one or two capsules daily. Children 6 to 12—one capsule daily. Give at bedtime for two or three days or until bowel movements are normal.

Supplied: Bottles of 30, 100 (FSN 6505-074-3169) and 1000 (FSN 6505-890-1247).

est, C. H. and Taylor, N. B.: *The Physiological Basis of Medical Practice*, 7th edition, Williams and Wilkins, Baltimore, 1961, p. 480.

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HOUSE OF DELEGATES / Continued

The concept of pooling the resources of several organizations to serve functions that are useful to them all is certainly not new. The joining together of individual agencies into a single entity to lend their collective weight to their programs, statements, and opinions is also well established. In commerce and industry, a number of foundations have been formed for just such purposes. The proposed academy would be a similar organization for the health professions.

The Committee is aware that the health scene is already overcrowded with advisory councils, commissions, panels, task forces, academies and ad hoc committees. These have a variety of sponsorships and are usually composed of eminent individuals, expert in one aspect or another of health care. These serve without pay and meet from time to time to ponder, discuss, and ultimately to report to and advise the agency or department of government that created their group. The overlap of interest of these groups, the discontinuity of their efforts, and the limited time their non-paid experts can devote to them all militate against their being productive. The net yield of this type of activity in terms of useful policy and direction is difficult to assess, but it seems fair to say that it is disproportionately small when compared to the time and effort involved. The Committee emphatically does not wish to add yet another voice to the babel of confusion that is already arising from these bodies. Instead, it wishes to propose a continuing, viable organization, geared to the collection, storage, and retrieval of data and their conversion into useful, effective programs and recommendations for the improvement of health and health services. For this purpose, the academy must have certain specific characteristics and relationships with its sponsors. The following organizational structure is offered to illustrate some of these characteristics and relationships rather than as a direct recommendation, since the Committee is aware that there are many other possibilities. If and when the Academy concept is adopted, its sponsors will undoubtedly expect to develop the specific details of an organization that best meets their requirements.

ONE POSSIBLE STRUCTURE FOR THE ACADEMY

(1) That it be a non-profit membership corporation with the sponsoring professional associations as members;

(2) That the member organizations be limited to (a) national associations in the fields of medicine, nursing, dentistry, osteopathy, medi-

cal education, hospital administration, health and hospital insurance; (b) national associations representing ancillary workers, such as optometrists, psychologists, pharmacists, and laboratory and x-ray technicians; and (c) national public health agencies.

(3) That the academy have a board of directors numbering approximately forty or fifty members, drawn from the participating organizations partly on the basis of their membership. It is obvious, however, that the number of members alone is not a sufficient criterion to determine representation since the different health professions do not exert the same influence over the planning, delivery, and cost of health care. It will therefore be necessary to apply an additional weight or factor to the various organizations in determining their representation on the board of directors. This may well be the subject of negotiation.

(4) That initially the directors be appointed by their respective member professional associations for terms of one, two, and three years, so that the board will ultimately consist of three classes of directors, each serving terms of three years.

(5) That tenure on the board of directors be limited to three terms or 10 years.

(6) That the board of directors elect a chairman from among its members triennially and that he be paid a salary commensurate with the claims made on his time and effort.

(7) That a voting member group be organized for the purpose of electing directors once the first, appointed directors have served their terms. The voting member group should be composed of sixty to seventy-five individuals, thirty-five to fifty of them to be distributed among the sponsoring agencies in a proportionate manner, with the remaining number to be chosen from interested branches of government and appropriate individuals from the public at large.

(8) That each year a slate of nominees for directors be proposed by a nominating committee of the board of directors and that further nominations, if any, be made from the floor at the annual meeting by any single member of the voting member group.

(9) That the directors not be employees, active officers, or trustees of their own professional associations.

(10) That the academy retain an executive officer and indicated supportive staff on a full-time salaried basis.

(11) That there be the usual division of function and responsibility between the executive officer and the board of directors.

To repeat, the preceding description is intended to convey the broad organizational outlines of the proposed academy. More specific details can be worked out by the sponsoring associations, once they have accepted the general concept and agreed to participate. It should be noted, however, that the type of organization recommended is designed to preclude domination of the academy by one or more of its member associations. It eliminates the possibility of interlocking directorates and, in general, divorces the academy completely from the politics of its parent societies. This is an essential condition without which the academy could not command the prestige and public confidence it must have to serve the purposes for which it is founded.

PURPOSES AND FUNCTION

The academy shall collect data relating to health care on a continuous basis and make provision for their efficient storage and retrieval. It shall analyze the import of those data, suggest policy, and make recommendations on all aspects of health care as broadly defined by the Committee. To accomplish this, it shall identify weaknesses and deficiencies in health services and relate them to available funds, facilities, and personnel to develop specific, practical solutions on a priority basis. Its reports shall be made to the parent organizations and all appropriate public and governmental agencies. They shall be made public and require only the prior approval of the board of directors of the Academy.

SCOPE OF ACTIVITY

The following is a partial list of the academy's areas of interest, research, and study:

(1) Distribution of health care personnel—deficiencies in number and type by area.

(2) Distribution and adequacy of health care facilities by area, to include hospitals, hospital based or free standing clinics, extended care facilities, home care services, and clinical laboratory services.

(3) Costs, to include medical and other professional fees by area or region, hospital and extended care facility rates, charges for other services, drugs, and sick room supplies.

(4) Available health insurance programs, cash or service indemnity, scope of benefits, completeness of coverage, cost.

(5) Delivery mechanisms by area, private solo practice, fee-for-service group practice, prepaid group practice, hospital practice in-hospital and clinic, full or part-time.

(6) Morbidity and mortality statistics by area or region.

(7) Professional education and training at the undergraduate, graduate, and postgraduate levels.

The above list is obviously incomplete but it does serve to indicate the range and type of investigation the academy will be required to undertake and the problems with which it must be equipped to deal.

STAFFING OF THE ACADEMY

The organization of the working echelons must be left to the executive officer and the board of directors to determine, but a few comments are pertinent at this point. Earlier in this report it was recommended that the Association encourage and assist constituent and component medical societies to organize divisions for socio-economic studies at their respective levels. It was suggested that when the size of component societies did not warrant such a department, the division be based on a region or a district branch, rather than individual counties. The function of these divisions would be to accumulate the information previously outlined, in a uniform manner, preferably suitable for central electronic data processing. The formation of these divisions would meet the immediate need of the AMA and the societies at the state and local levels for current data and would be worthwhile on that score alone.

If the academy's other member professional associations could be motivated to form similar local and state bodies in their own fields, the health professions would have at their disposal a complete data harvesting network, with horizontal and vertical channels or coordination and communication. The academy could then serve as an apical nerve center, equipped to analyze the data it receives, synthesize policy, and disseminate processed information for the benefit of its subgroups. The divisions would remain with their respective societies at least until the academy is well established and has proved its viability. At that time, any duplication of function could be eliminated by transferring individuals, or even entire divisions, from the professional societies to the academy, with corresponding adjustments in financial contributions.

FUNDING OF THE ACADEMY

The funding of the academy should be the responsibility of the participating associations. Their initial investment should be proportionate to their representation on the board of directors and should not be large since, at the beginning, the academy staff will rely on the mechanisms established by the member organizations for data accumulation. Some investment will be required for data processing equipment, and assessments

HOUSE OF DELEGATES / Continued

of member organizations will be necessary to defray continuing expenses.

The availability of federal grants for establishing the academy should be investigated, but at no time should such grants constitute a major portion of the academy's income. Once the academy is formed and is functioning satisfactorily, it may be allowed to undertake limited research projects on a grant or fee-for-service basis, provided that such activities do not interfere with the fulfillment of its primary functions or conflict with its basic purposes.

THE ACADEMY—PROS AND CONS

Disadvantages

(1) *It will be difficult and time consuming to bring the associations representing different disciplines together in this type of cooperative effort.* This is undeniable and, if the academy were the sole thrust of the Committee's recommendations, the entire concept would be unsatisfactory. While the process of organizing the academy is in process, however, the Committee would expect that, by implementing its short-term proposals, the AMA and the state and county medical societies will improve their own functions sufficiently to meet their interim needs.

(2) *The AMA would relinquish its control over policy making.* Such loss of authority is imaginary rather than real. To begin with, policy formed by the academy, based on valid data, and developed in a continuous and logical manner, should almost invariably be acceptable to the House of Delegates and the Board of Trustees. In addition, since the AMA's structure would remain intact, its control over internal policy formulation would be undiminished and it would retain the right to reject any or all of the academy's recommendations.

(3) *By adopting the academy concept, the AMA would admit to inadequacy in the field of health care planning.* It is the Committee's opinion that, far from detracting, the Association would add to its stature by assuming the initiative in establishing a truly competent research and development organization among the health professions.

Advantages

(1) *The academy would bring together all or most of the disciplines involved in the delivery of health services and thereby make coordinated and effective planning possible.*

(2) *The academy would free the framers of policy recommendations from political repercussions in their own professional associations.* It will

therefore be free of the stigma of trade unionism and its recommendations will be more acceptable to the public than those made individually by the member associations.

(3) *The present political structure of the AMA and all other member associations will be preserved intact and hopefully improved.* Should the proposed academy fall short of its objectives, there would be no disruption of continuity or function among its sponsors.

(4) *The academy would not interfere with continuing legislative or public relations activities by the AMA or any of the member organizations.*

(5) *The academy would not interfere with continued political action by any organization of health care professionals.*

SUMMARY

It may seem visionary and impractical to expect professional organizations to unite in a venture of this sort since their past history does not indicate a pervasive spirit of cooperation among them. On the other hand, it is time that all professional societies realize that they have new and important functions to serve in an increasingly complex environment. They will be required to render services to their members in terms of informing them of current trends, advising them on the courses of action they should take, and representing them in negotiations with insurance carriers, consumer groups, government, and a number of other agencies. To be effective in this, they must enjoy the best possible public image, be meticulously informed on all aspects of health care, and have the complete support and confidence of their members. The joint type of organization proposed herein will contribute toward the realization of all these conditions.

The alternative to the formation of an Academy of Health Professions is the continuation of the present and demonstrably futile endeavors of individual associations to secure data, formulate policy, and gain acceptance of that policy by government and the consumer public. There is little reason to expect this type of activity to be more successful in the future than it has been in the past.

The health professions have much to contribute to health planning that is currently being lost. This is not only an immediate detriment to planning but, by diminishing the stature and influence of the professional associations, it deprives the public of their future advice and assistance. The pooled expertise and planning capacity of the health professions is a public asset that should not be allowed to go to waste. The Committee believes that the proposals contained herein will facilitate the full development of that potential.

MINORITY REPORT

COMMITTEE ON PLANNING AND DEVELOPMENT

Submitted by John H. Budd, M.D.

As a member of the AMA Committee on Planning and Development I am deeply concerned with the Committee Report in its present form. Many of the viewpoints expressed and the recommendations advanced differ, sometimes sharply, from my own and from what I consider to be the sentiments of the House of Delegates. I therefore feel impelled to make my reactions and opinions known.

The Committee Report is extremely important. Some of its proposals would lead, if adopted, to far-reaching and epochal changes in the philosophy, policy, responsibility, scope of activity and commitment of AMA.

I also find a good deal of the basic tone unacceptable to me, and, I expect, to the House of Delegates, notably the air of apology and self-denunciation which pervades some of the Report.

After receiving the final edited version of the Report, and prior to its submission to the Board of Trustees, I sent to the Committee Chairman an annotated critique of the document, which he graciously acknowledged, and from which he stated he adopted a number of my suggestions. I also wrote to the Board of Trustees, urging that precipitate action be avoided and that the Report be returned to the Committee for reconsideration and revision.

In support of the latter recommendation I offered a partial list of passages which I considered unacceptable to my own philosophy and which I believe the House of Delegates should weigh very seriously. These passages still appear in what I understand to be the final edited version and I am troubled.

Among the points of disagreement and the declarations which I am disinclined to support, and which prompt this Minority Report are the following:

(1) Page 4, line 40 et seq. "Further encroachments (on the time honored privileges, prerogatives and authorities of physicians) seem inevitable if the public is to get the health services it needs at a price that it is able, or willing to pay."

Comment: the "soaring demand for health services" and the reasons for it, as well as the predictions of demand outstripping capabilities, rising costs, depersonalization of physician-patient relationship are thoughtfully and accurately ex-

pounded; likewise the need to attract into medicine the best qualified individuals in increasing numbers. However, on page 5, line 20 et seq. I see no need for supporting further restriction of traditional privileges and freedom; in line 33, instead of the term "minimal regimentation" I prefer "maximum professional independence and freedom of choice" for both physicians and patients. Regimentation in any degree is not an incentive.

(2) Page 6, line 6. The WHO definition of health as it pertains to the field of medicine and the responsibility of the physician is extremely broad. It is, of course, Utopian and thus doubtless desirable, but "complete social well being" which involves satisfaction in financial, political, esthetic, climatic, transportation, recreational and endless other areas seems to me beyond the responsibility, expertise and limits of time and physical capability of the medical profession.

Assuming responsibility for conditions which appear well beyond the influence and control of AMA is to invite more criticism of the medical profession when their impossibility of attainment becomes evident.

(3) Page 6, lines 43-44. I do not like the suggestion that "restraints on the authority and scope of activity of public health officials" precluded their success and leadership in the planning and implementation of health care programs, thus implying that their authority and scope of activity be extended (while those of physicians will, as warned, be abridged).

A major contribution of AMA in "bringing order to this chaotic field (page 6, line 48) would be to encourage prudence in political promises, careful selection of achievable priorities in health goals, and restraint in committing taxpayers' money.

(4) Page 7, line 51. "people will support, or at least not oppose, the expenditure of large sums of tax money on broad programs for social welfare."

I believe the enthusiasm for such expenditures is cooling, and will continue to wane. Rejection of proposed levies for school bonds, police and fire department salary increases and similar worthy purposes is increasingly common.

(5) Page 10, line 32. "In the past one either paid for medical services or received them from government." This is neither a factual or fair statement. The alternatives to paying for medical services have not been limited to governmental bounty. True, government to some extent (and often in inadequate and penurious degree) financed some care but much has been furnished by the personal benevolence of physicians and

other philanthropic individuals. It should also be remembered that government does not provide "Medical Services"; it only exacts taxes to pay for such care.

(6) Page 13, line 30. That the shortage of physicians in rural communities is real and serious is agreed but I do not believe that "heavy patient loads and poor reimbursement," especially the latter, are substantial reasons for the shortage in these communities and I think such reference is unjust and may offend many such practitioners.

(7) Page 15, paragraph 2. This section, regarding manpower deficiencies is well done; the points made are good. I suggest it should be expanded to make clear the fact that the basic shortage is in the number of physicians *providing direct patient care* because of the many who are attracted into (a) research, and (b) education (both admittedly vitally necessary, always alluring, exalting and intellectually rewarding, free of the obligation and inconvenience of dealing directly with sick people, and now more adequately reimbursed), (c) administrative medicine (insurance, industry, hospital operation, etc.) with paid vacations, sabbaticals, retirement pensions, etc. and (d) the government, including of course those appropriated by the military services.

Much capricious, arbitrary and unfair criticism has been directed at AMA as being responsible for the shortage of physicians. The reasons just recited are beyond the influence and control of AMA and this fact should be brought to public attention.

(8) Page 18, line 43 and in all places from here on where "usual, customary prevailing and reasonable" are referred to, especially where AMA policy is concerned, the phrase should read only "usual, customary and reasonable" even though, by implication, the "prevailing" concept is included over the objection of a number of State Delegations, including Ohio's.

(9) Page 19, line 5. I am unable to agree that it is illogical for AMA to "call for objective experimentation in the organization of medical services and in the same breath express its preference for private, fee-for-service practice." I do not believe it inconsistent to call HEW to task for giving preferential *financial* support and subsidy to one form of medical practice and simultaneously express the Association's partiality for another. There is a difference, in my judgment, be-

tween providing funds (from taxpayers) to subsidize one form of organization for medical practice (HEW action) and expressing a preference (AMA action) while still advocating objective investigation and experimentation.

(10) Page 20, paragraph 1. That other systems of practice are in some circumstances acceptable, appropriate, advisable, or even necessary, is undeniable, but private practice should not be disparaged nor its support abandoned.

I would be pleased to see the paragraph restated—"in seeking as its goal the highest quality of patient care, the most effective use and broadest availability of the science and art of medicine, the Association advocates factual investigation and objective experimentation in new methods of delivery of health care, while still maintaining faith and trust in the private practice of medicine and pride in its accomplishments."

(11) Page 21, line 3. "There has been an appreciable increase in physicians' incomes since 1966 while, during the same time, the medical profession has been unable to bring about a material expansion of its capacity to deliver health services."

One of the reasons for increased income *is indeed* increased productivity and output by physicians working longer hours. It is true that use of automation, data processing, computer techniques in history recording and differential diagnosis, etc. are only beginning and offer great possibilities; however, I consider gratuitous support of the frequently unwarranted criticism of physicians' incomes unnecessary and offensive.

(12) Page 23, line 3. "Medical societies have absolutely no jurisdiction over the charges made by their members."

Medical societies have indeed rather severe jurisdiction over charges made by members when excessive. Peer review, honestly used, is a potent instrument and grossly excessive fees may be considered unethical, and thus the offending member may be subject to discipline by censure, suspension or expulsion. Though not legal power, this is effective if used. Furthermore, in Ohio at least (and maybe in other states as well), violation of the ethics of a professional society by a member can result in withdrawal of the offender's license by the State Board. This is legal power.

(13) Page 26, paragraphs 2, 3, 4. The merits, legality, feasibility and attainable benefits of audit of physicians' office performance are complex questions. I am well aware of the risks, and sometimes the existence of incompetence, negligence, exploitation, over-utilization, mal-utilization and other defects and deficiencies in the of-

face, and it is true that the policing procedures usually present in the hospital are missing in the office. Whether the proposals for office audit are the most effective and least harmful I am not prepared to say. My only plea in this complex problem is for caution and dispassionate judgment.

(14) Page 31, line 8. The distrust and fear of government intrusion into medical practice, described as "atavistic" is indeed well founded and as justifiable as most primitive instincts. When politicians' promises become impossible to fulfill, the medical profession is usually held to blame. The current vilification of physicians generally for those Medicare inequities, costs and abuses for which the medical profession has little or no responsibility is disheartening.

(15) Page 37, line 12. I do not approve the 51 per cent consumer representation included in PL 89-749 and I agree with the well-stated reasons in this paragraph. However, I would delete the last sentence in paragraph 2, page 37, line 17 beginning—"Nevertheless, the intent of the law is clear. . . ." Compliance with the law is proper but offering gratuitous endorsement is unnecessary.

(16) Page 38 beginning at line 15. I would prefer the following construction:

(1) Medical societies at all levels should support the concept of PL 89-749 and the establishment of properly constituted planning agencies, provided,

(a) the areawide comprehensive health planning agencies at local levels have broad community representation *on their boards of directors*, in contradistinction to their advisory committees and councils. It is inadvisable to permit local governments, composed as they are, of elected and appointed officials of varying capability and tenure to dominate or control health planning.

(b) that medical societies have proper representation on the *executive bodies* of the planning councils. The societies should not accept a purely advisory function.

(2) "To this end. . . ." This paragraph to be retained as in the text.

(17) Page 42, line 2. Rather than "create the general belief," which sounds like promoting de-

ception, I prefer "make it clear" as a more positive and accurate statement.

(18) Page 45, lines 41-42. "The Association's opposition to Medicare was more emotional than objective. . . ."

I consider this a shocking denunciation. The accuracy and objectivity of AMA's arguments in opposition to Medicare are clear to me. AMA warned of abuses, over-utilization, costs exceeding estimates, misunderstandings, inequities and failures which are now very evident. Most testimony before the House of Delegates 1965 Annual Convention was in fact more objective than emotional. All AMA testimony before Congressional Committees was consistently objective.

(19) Page 47, line 20 et seq. I deem this an unjust appraisal of the physicians who comprise the House of Delegates. Having successful practices, with patients derived mostly from middle and upper income brackets (though this is frequently not the case), being conservative in political and social philosophies, and being concerned with preserving the traditions of their profession and their time-honored relationships with their patients are not derogatory qualities and I do not believe they preclude objective judgment by honorable men. Criticism, to be sure, is offensive when unwarranted, but I don't think most physicians are resentful of legitimate criticism.

This list is partial, and represents a sampling. My purpose is not to destroy a comprehensive document of good intent, or to malign a committee on which it was a privilege to serve. My criticisms are intended to be constructive.

There is merit in much of the Report's commentary, and in many of its analyses and recommendations. To point out just a few, the depiction of the present social and political climate, (page 9, line 1), exposition of the varying non-medical reasons for poor health of the underprivileged (page 11, line 38), and evaluation of delivery systems of health care, including closed panel groups, are perceptive, relevant and accurate.

The document deserves fair hearing and calm judgment. In my opinion it needs modification; precipitate action should be avoided.

I hope that my dissenting opinions will be given serious consideration, my suggested changes adopted, and my motives understood.

HOUSE OF DELEGATES / Continued

RESOLUTION NO. 2, AMENDMENT OF ABORTION LAWS, BY J. PURVES MCLAURIN, DELEGATE FROM THE SCIENTIFIC ASSEMBLY (OB-GYN)

WHEREAS, Mississippi law prohibits abortion except where continuation of the pregnancy poses a threat to the life of the patient or where the pregnancy results from forcible or statutory rape, and

WHEREAS, A significant number of states have recognized that abortion may be lawfully performed when one of the foregoing conditions prevails or when the pregnancy results from incest, when continuation of the pregnancy poses a threat to the health of the patient, and/or when, in cognizant medical opinion, there is a probability that the infant will be born deformed, and

WHEREAS, The American Medical Association and the American College of Obstetricians and Gynecologists have respectively approved abortion under any one of the foregoing conditions, and

WHEREAS, There is strong opinion among citi-

zens of the state and the medical profession that the Mississippi law should be amended to reflect these additional socially and medically acceptable conditions under which this procedure may be performed, now, therefore, be it

Resolved, That the policy of the Mississippi State Medical Association be that abortion should not be performed except when (1) the pregnancy results from forcible or statutory rape or from incest, (2) continuation of the pregnancy poses a threat to the life or health of the patient, or (3) when, in cognizant medical opinion, there is a probability that the infant will be born deformed and that the procedure be undertaken by a physician only (1) when consultation has been obtained in writing from another physician and (2) the procedure is performed in a licensed hospital, and be it further

Resolved, That this policy in no way alters the association's long-standing view that criminal or illicit abortion be vigorously prosecuted under applicable criminal law, and be it further

Resolved, That amendments in existing Mississippi law be sought to implement this policy during the 1971 Regular Session of the Mississippi Legislature.

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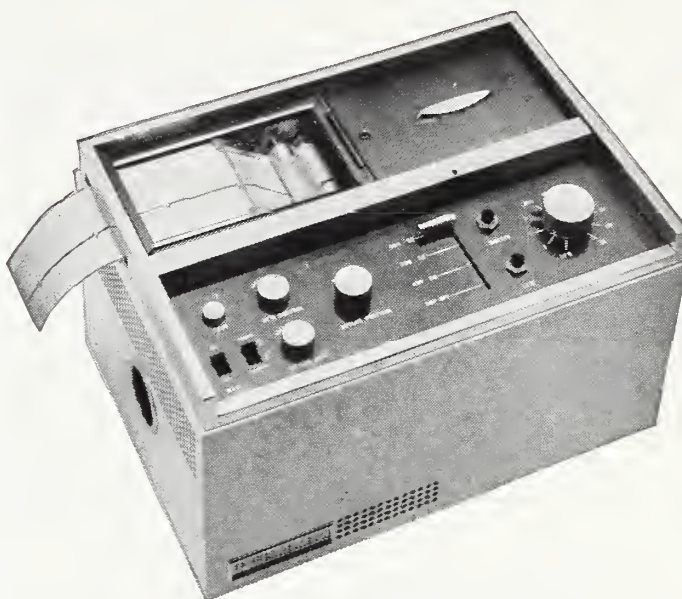
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Index to Advertisers

Arch Laboratories	251	Lakeland Nursing Center	14
Breon Laboratories	8	Lederle Laboratories	4, 250
Bristol Labs	12	Eli Lilly	front cover, 18
Burroughs Wellcome	236B	William S. Merrell	15
Campbell Soup Company	192A	Mid-South Medical Association	162
Dow Chemical Company	14A	National Drug Company	second cover, 220A, 220B
Geigy	236A, 236D, 237	Wm. Poythress	236C
Glenbrook Laboratories	233	A. H. Robins	14B, 192D, 204A, 204B, 239
Highland Hospital	6	Roche Laboratories	7, 159, fourth cover
Hillcrest Hospital	11	Julius Schmid	16, 17
Hoechst Pharmaceuticals	243	Searle	192B, 192C
Hynson, Westcott and Dunning	3	Smith, Kline and French	10
Kay Surgical	251	Thomas Yates and Company	third cover

IN CONCLUSION

A state-wide peer review system is being organized by the Illinois State Medical Society and will be operational in June. Plan calls for searching review of care, including physicians' services and private and governmental care programs. Objectives are conservation of patients' health dollar, proper use of M.D.'s and hospitals, and high standards of practice. State government and major insurance carriers have agreed to abide by society's decisions.

Small cars are the killers, says the University of North Carolina in study report of 270,000 auto accidents. Worst record was made by the Volkswagen bus, followed by Volkswagen sedans, Chevy II, Corvair, Plymouth Valiant, small Dodge, and Ford Fairlane. Study also showed that American Motors Hornet is costliest car to fix after low speed crash and 1970 Volkswagen is cheapest.

First multiphasic screening services for children under Mississippi Medicaid was initiated in Vicksburg. Pilot program was carried out by State Board of Health which will be paid by Medicaid. An estimated 1,800 Warren County children on welfare were eligible for exams to find heart, vision, and hearing defects, tuberculosis, anemia, and congenital anomalies. Children with problems are referred to private physicians or to county health department.

United Medical Laboratories of Portland, Ore., has filed suit for \$24 million and injunctive relief against discriminatory practices by medical organization. Named as defendants were AMA, College of American Pathologists, California Medical Association and its component medical societies, and California Blue Shield. UML asks court to rule that M.D.-clients may mark up lab charges to patients.

Joint Commission on Accreditation of Hospitals will accredit approved institutions for only two years instead of former three. Accreditation may be for only one year when JCAH finds that required improvements have not been made. Fees for surveys are higher with prime surveyor (M.D.) costing \$240 per day and \$150 per day for other survey team members. ECF survey fees are \$220 per day.

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CONTENTS

ORIGINAL PAPERS

- The Management of Early
Invasive Carcinoma of the
Cervix: Surgery or
Irradiation? **253** BERNARD T. HICKMAN,
M.D., and JOHN Y.
GIBSON, M.D.
- New Dimensions in
Emergency Medical
Rescue Services **257** B. J. SHELL, PH.D.,
J. E. CLARK, PH.D., and
P. Y. NICHOLAS

SPECIAL ARTICLES

- Clinicopathological
Conference XCVI **262** ALVIN E. BRENT, JR.,
M.D., and LOUIS
SCHIESARI, M.D.
- Radiologic Seminar XCV
Multiple Myeloma **268** JUNE G. BLOUNT, M.D.

EDITORIALS

- The Family Practice
Specialist: Medicine's
New Man **273** Key to Delivery?
- Part 1-B Is a
Two-way Street **275** Distress and Protest
- The Nelson Syndrome and
Pill Complications **276** Insidious Doubt
- Medical Corpsmen,
New Manpower Pool **276** Salvaged Health Careers
- The Cost Dilemma
of Hospital Services **277** Up, Up, and Away!

THIS MONTH

- The President Speaking **272** Past and Future:
The Task Ahead
- Medical Organization **283** Building Addition
Open House

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Southern Ob-Gyn Seminar Set for July

The 16th annual Southern Obstetric and Gynecologic Seminar is scheduled for July 27-31 at Grove Park Inn in Asheville, N. C.

A wide variety of obstetric and gynecologic subjects will be covered including cryosurgery, vaginal surgery, cervical dysplasia and carcinoma, obstetrical anesthesia, infertility and hormonal and pituitary ovarian balance studies.

Faculty for the seminar includes Dr. Bayard Carter of Duke University, Dr. Robert Barter of Washington, Dr. Raymond Kaufman and Dr. Robert Franklin of Baylor University, Dr. Robert Greenblatt of Georgia, Dr. Duane Townsend of California, and Dr. Charles Hendricks of the University of North Carolina.

Registration is limited to the first fifty applicants. For information and registration contact Dr. George T. Schneider, Ochsner Clinic, 1514 Jefferson Highway, New Orleans, Louisiana 70121.

Dr. P. C. Zamecnik Receives Passano Award

The Passano Foundation announced the selection of Dr. Paul C. Zamecnik to receive the \$7,500 Passano Award for 1970, one of the highest awards in American medicine.

The Passano Foundation is a Maryland non-profit corporation with the sole purpose of encouraging medical science and research, especially that having a clinical application. Of the 30 Passano laureates sharing in the award since 1945, six have subsequently received the Nobel Prize.

Dr. Zamecnik, 57, is professor of oncologic medicine at the Harvard University Medical School and director of J. Collins Warren Laboratories of Huntington Memorial Hospital at Massachusetts General Hospital in Boston.

His research, on which the award is based, centers on the chemical processes in both normal and tumor cancer cells, particularly the incorporation of amino acids into proteins—the building of proteins by body cells.

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NEWSLETTER

May 1970

er Doctor:

is pressing for equal time to rebut slanted, editorializing CBS television series making pitch for compulsory health insurance. The hour-long documentaries attacked delivery system and care costs. First program, "The Promise and the Practice," underscored out-of-text examples to allege unavailability of medical services, long waits by patients, and difficulty of getting into a hospital.

Second segment, "Don't Get Sick in America," used far-fetched examples on bankruptcy in illness. One was dialysis case and other was private patient with no insurance coverage which seven out of eight Americans have. AMA seeks hour in prime time to give facts and figures.

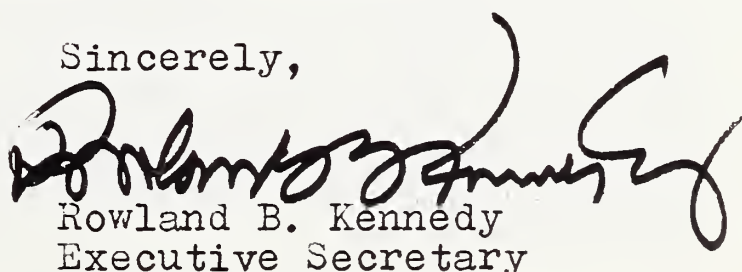
Executive session vote in powerful House Ways and Means Committee assures that effort to get chiropractic into Medicare has failed. Pressures were brought on Congressmen from states licensing cultists to put chiropractic in Part 1-B, and more than 100 Representatives killed such bills. Word is out that committee is also about to defeat HEW proposed Part C which would put closed-panel or prepaid practice options in Medicare.

Preliminary hearings have been held on \$24 million lawsuit by United Medical Laboratories against medical organization and Blue Shield. Complaint against AMA, California Medical Association, College of American Pathologists, and others seeks treble damages and injunction alleging antitrust practices in clinical laboratory field. Plaintiff also seeks setting aside 1969 CRVI codes on certain lab procedures.

The nation's biggest state medical society, New York, has endorsed program of national health insurance. Program would be tailored along lines of Medicare, utilizing co-insurance but no deductibles. Use of private carriers is urged, and plan calls for financial participation by employers and states. There is similarity between N.Y. program and that proposed by state's Gov. Nelson Rockefeller.

American Academy of General Practice has endorsed AMA's Medcredit plan for voluntary, tax-credit health coverage. Action was announced by AAGP Board Chairman Robert Quello who said that "we believe an acceptable alternative is provided by insurance through tax credits." Support is expected to give proposal new impetus.

Sincerely,



Rowland B. Kennedy
Executive Secretary

Educational Cassettes Developed for Nurses

A new nursing service education program using audio-tape cassettes has been announced by the National League for Nursing, New York. Designed for inservice education of nurses, nurse administrators and other health professionals, the NLN Nursing Service Cassettes features lectures and discussions packaged in 60-minute cassettes suitable for group or individual use.

Two initial NLN nursing service cassette series are devoted to staff development and the nursing audit. These were adapted from NLN's 1969-70 hospital nursing service continuing education workshops. The League has produced these cassettes to meet the needs of hospitals, nursing homes, extended care facilities, public health agencies, and schools of nursing to study nursing topics of current interest with nursing authorities.

The staff development cassette series has been recorded by Myrtle Kitchell Aydelotte, Ph.D., director of nursing services, University of Iowa Hospitals, Iowa City. This series is intended to help nurse administrators stretch their professional development, and suggest ways nursing departments can improve staff development programs or create new programs where the need exists. The series of four cassettes highlights the factors affecting performance of nurses, behavior patterns of personnel, case histories, and evaluation of staff development program. The cost is \$25.00.

The nursing audit cassette series by Helen W. Dunn, director of nursing, University of Illinois Research and Educational Hospitals, Chicago, is designed to help health service institutions improve techniques of evaluating nursing care through effective management of the nursing record, and to develop skills in auditing methods. This series is on two cassettes accompanied by a *Nursing Audit Workbook* which includes documents and forms for supplementary listener instruction. The cost, including the *Workbook*, is \$20.00.

Instructions for use of the cassettes in inservice education seminars, group listening, by individuals, and as a library resource are included with each series.

The NLN Nursing Service Cassettes have been produced in collaboration with Instructional Dynamics, Inc., Chicago, leaders in the field of audio-education techniques. Easily played on portable playback units, the cassettes offer versatility and low cost for institutions and individuals interested in keeping abreast of recent thought and developments in health care.

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Precautions: As with other thyroid preparations, an overdose may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin within four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. Patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, Addison's Disease (chronic subcortical insufficiency), Simmonds' Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction.

Side effects: The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they occur, are secondary to increased rates of body metabolism: sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from an increase in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction in dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and measurements about every 90 days. Final maintenance dosages usually range from 0.2-0.4 mg. daily. In adult myxedema, the initial dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals to 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.5 mg., scored and color-coded, in bottles of 100 and 500. **Injection:** 500 mcg. lyophilized active ingredient and 10 mg. of Methylcellulose N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent.

SYNTHROID (sodium levothyroxine) INJECTION may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.



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DATELINE

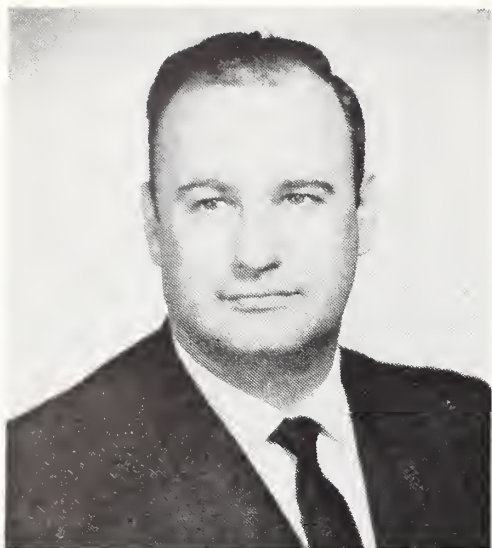
Medex Data Makes
at Biloxi Jackson - "Medex Data," or M.D., a new billing and practice management service for Mississippi physicians will debut at the 102nd Annual Session with a special exhibit. Presentation seeks determination of interest in low-cost computer billing, receivables analysis, practice analysis, and other reports. Medex Data is wholly owned by the Mississippi State Medical Association and will cost less than commercial services. Phase-in will be on first-come, first-served basis over next 12 months.

It Taste Good
e an Rx Should Kalamazoo, Mich. - An Upjohn research scientist, Louis Schroeter, has published a new book, "Ingredient X," with fascinating disclosures about national preferences in medicines and problems of drug-making. Germans, Italians, South Americans, and some Asians want orange-flavored medicines, but Norwegians prefer anise. Americans have no particular preference, but cherry-flavored liquids remain in good demand. He says flavor is just one of many acceptability problems in drugs.

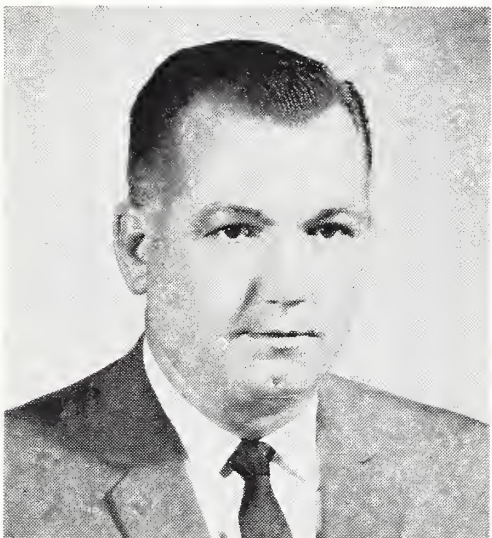
AMA Acceptance Is
dicted for CPT Chicago - AMA has published the second edition of "Current Procedural Terminology" designed to assist in preparing claims for medical services under insurance and government programs. But acceptance is likely to be slow, because five-digit codes will not initially replace current four-digit designations used by Blue plans, CHAMPUS, Medicare, and Medicaid. Estimates are that conversion costs to fiscal administrators could be substantial and out of proportion to benefits.

Supreme Court Nominee
Mayo Lawyer St. Louis - New Supreme Court nominee Harry A. Blackmun, current member of the 8th Circuit Court of Appeals, is no stranger to medicolegal matters. The native of Rochester, Minn., once served for eight years in private practice as legal counsel to the Mayo Clinic. Judge Blackmun has published papers and studies on medicolegal matters, and is considered expert in the field.

Oral Pill Poll Says
Pill Is Coming Back Raritan, N.J. - A special Gallup Poll made for The Pill shows that The Pill is coming back. Hearings conducted in Congress gave Pill setback, but a poll says that just 13 per cent of women have gone off oral contraceptives, while 69 per cent said they would continue to take them. But 17 per cent of the "dropouts" have gone back, and other 26 per cent are undecided about returning.



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Caution: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment or Vaginal Tablets have been extremely rare. To avoid reinfection, it is recommended that the patient refrain from sexual intercourse during treatment or the husband wear a condom.

Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet is inserted high in the vagina, twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.

Dosage forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil, with inserter—enough for a full course of treatment. Store under refrigeration.

Federal law prohibits dispensing without prescription. CANDEPTIN is a registered trade-mark of Julius Schmid, Inc.

References: 1. Olsen, J. R.: *Journal-Lancet* 85:287 (July) 1965. 2. Lechevalier, H.: *Antibiotics Annual 1959-1960*, New York, Antibiotica, Inc., 1960, pp. 614-618. 3. Giorlando, S. W., Torres, J. F., and Muscillo, G.: *Am. J. Obst. & Gynec.* 90:370 (Oct. 1) 1964. 4. Friedel, H. J.: *Maryland M. J.* 15:36 (Feb.) 1966.

SKF Announces New Drug

Smith Kline & French Laboratories have announced that a new prescription drug for control of the manic episodes of manic-depressive psychosis is now available to physicians.

It is called "Eskalith," SK&F's brand of lithium carbonate.

Use of lithium in manic-depressive psychosis has been studied in the United States and many other countries. The results of these studies have been reported in numerous published papers and have shown that lithium produced clinical improvement in a large percentage of the manic patients treated.

Manic episodes in manic-depressive psychosis, one of the most difficult treatment problems facing the psychiatrist, has not responded satisfactorily to conventional psychopharmaceuticals. Certain anti-depressants have been valuable in managing depressive episodes, and electroshock treatments sometimes provide temporary remission. However, tranquilizers with calming action have been only partially successful in treating manic episodes.

"Eskalith," however, when given to a patient experiencing a manic episode, calms the patient and controls acute symptoms, usually within a matter of days. "Eskalith" is not recommended for use in depressive episodes.

Toxicity may develop with lithium carbonate at doses near therapeutic levels. For this reason, patients on lithium carbonate must be maintained under close clinical supervision. Blood levels should be monitored regularly, especially during the initial stabilization period.

It is essential for the patient to maintain a normal diet, including salt, and an adequate fluid intake. Early symptoms of lithium toxicity—such as diarrhea, vomiting, drowsiness, muscular weakness, lack of coordination—mean the patient should stop the drug and contact his physician. Such symptoms can usually be treated by reducing dosage or stopping the drug and resuming it at a lower dosage 24 hours later. Other adverse effects can include confusion, dizziness, restlessness, rash, and transient visual disturbance.

The drug is contraindicated in patients with significant cardiovascular or renal disease, or evidence of brain damage.

Information regarding the safety and effectiveness of the drug in children under 12 is not available and its use in them is not recommended at this time.



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ORIGINAL PAPERS

The Management of Early Invasive Carcinoma of the Cervix: Surgery or Irradiation?

BERNARD T. HICKMAN, M.D., and JOHN Y. GIBSON, M.D.
Jackson, Mississippi

THE CORRECT MANAGEMENT of cervical carcinoma is a controversial subject at best, and discussions have been known to become heated. All physicians want to do the best thing for their patients; the problem is finding out what is the best thing to do. As has often been said, "one can prove (or disprove) anything with statistics." For this reason, it is fallacious to compare the statistics from one institution treating a certain type cancer by one form of therapy with those of a different institution treating the same type cancer by some other modality. Also, the ability of the operator must certainly be considered. The statistics from M. D. Anderson Hospital would certainly be expected to be more valid and superior to those from Smalltown Hospital.

With this in mind, it was decided to compare two separate methods of therapy for early invasive carcinoma of the cervix in one institution.¹ This involved several problems in order to be as unbiased as possible. One person had to supervise all of the surgery, and one person had to supervise all of the radiotherapy. As uniform as practicable selection for surgery patients and as

uniform as possible radiation dose and method of dose delivery for radiotherapy patients had to be maintained. All patients had to be jointly

A comparison is made of the surgical versus radiotherapy management of 129 cases of early invasive cervical carcinoma treated at the University Medical Center. Cure rates are similar but complications differ.

staged by the two supervisors, and the stage of the lesion agreed upon. Then a random card selection of patients had to be made so that satisfactory and difficult cases would be randomly distributed.

There were a total of 129 patients with International Stage I carcinoma of the cervix treated at University Medical Center between September 1958 and September 1965. Sixty-six were treated with irradiation and 63 were treated surgically. All of the patients have been followed for

From the Department of Radiology, University of Mississippi School of Medicine.

over three years but only 99 have been followed over 5 years; 49 of these being treated surgically and 50 receiving radiation therapy.

None but Stage I cases were included in this random study. This staging refers to those lesions which are frankly invasive but which are limited to the cervix itself with no extension into the parametrium or onto the vagina. The stage

0 or carcinoma-in-situ type of cases were not included in this series. Those patients were generally treated with conization or simple hysterectomy depending upon the patient's age and desire for a family. The clinical Stage II and III cases and most of the clinical Stage IV (or far advanced) cases were treated solely by irradiation therapy. Those patients that presented with recurrent carcinoma after therapy were individualized as to the type of therapy which was best

ISODOSE CURVES

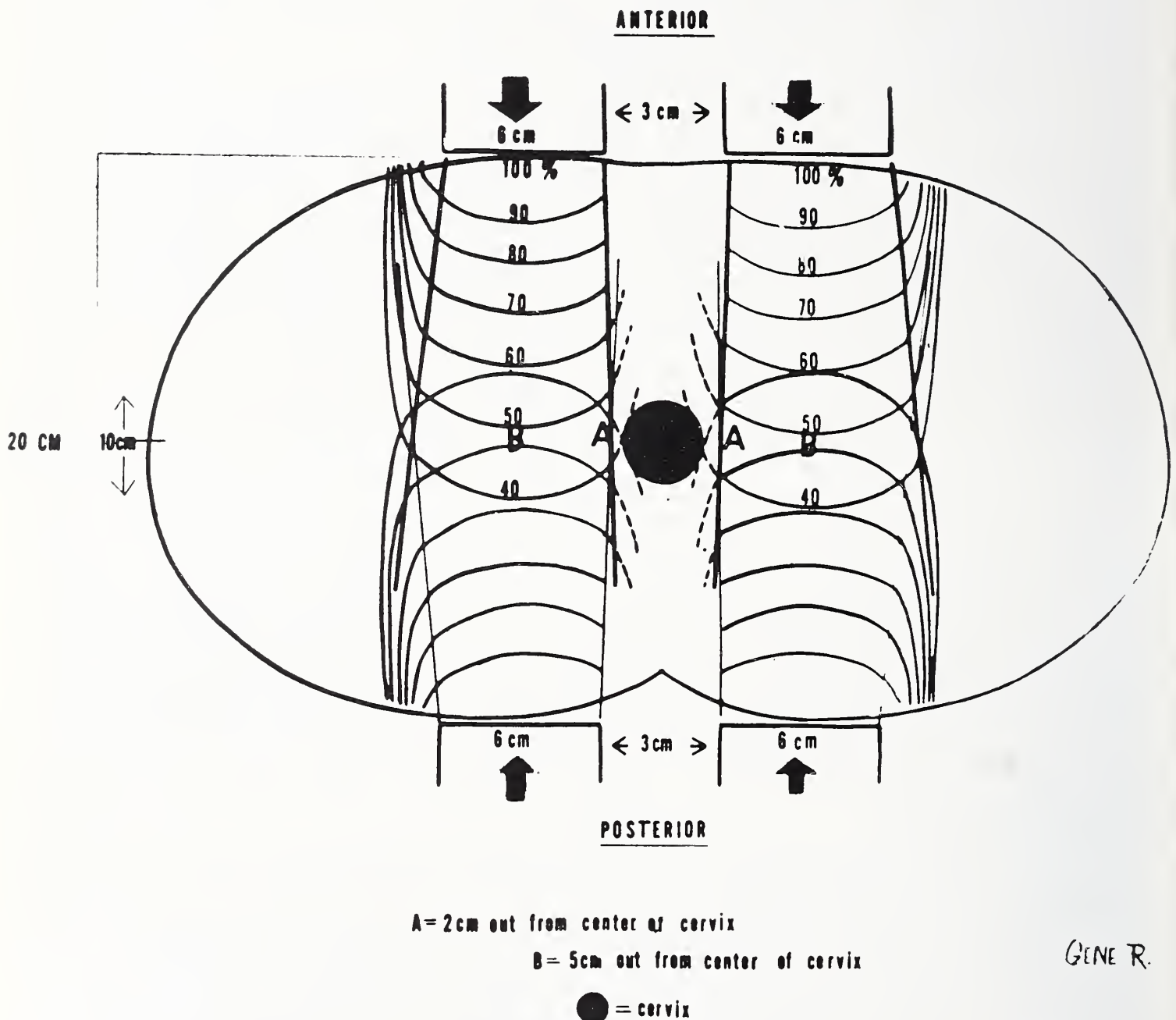


Figure 1. This diagrammatically illustrates the dosage distribution through a cross-section of a patient's pelvis from opposing anterior and posterior split ports from Cobalt-60 teletherapy.

The central black dot represents the cervix, the paracervical area is represented by point A and the parametrial area is represented by point B.

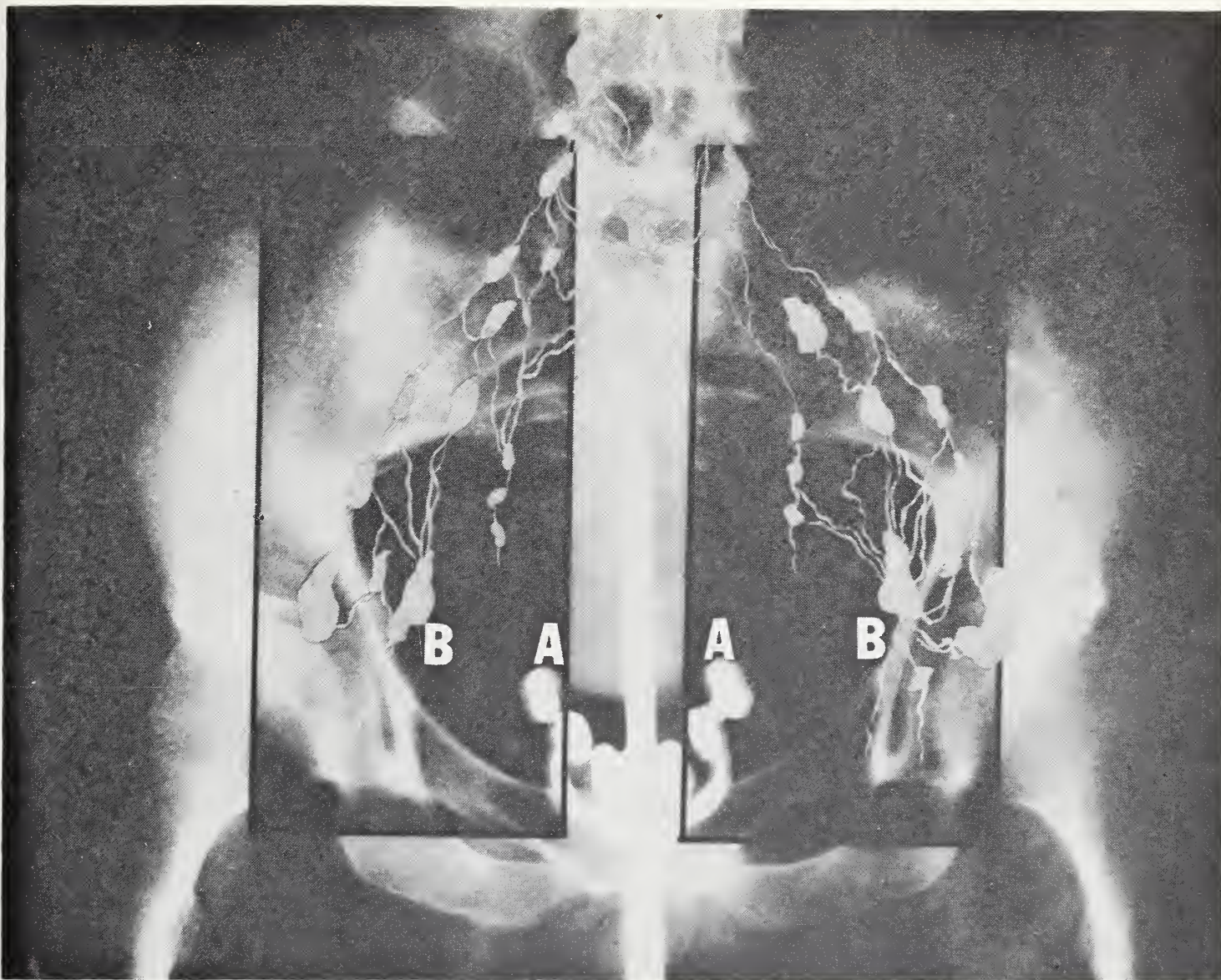


Figure 2. The Ernst radium applicator is seen in place at the cervix. The darkened rectangular ports represent the area treated with the external Cobalt-60 beam. The pelvic lymph node chains

are superimposed and it is seen that they are treated mainly with external irradiation while the cervix is treated mainly with radium.

suited to their particular case. In general, those patients that had been treated with irradiation were considered for surgical management and those that had been previously treated surgically were considered for radiotherapy.

The type of surgical therapy offered was a modification of the Wertheim procedure which consisted of a radical hysterectomy with removal of a generous portion of the vaginal cuff and a dissection of the pelvic lymph nodes.

The radiation therapy was administered with two modalities. Using Cobalt 60 teletherapy, radiation was delivered through opposing split anterior and posterior pelvic ports measuring 14 x 6 cm. until a parametrial dose of 3500r was given. This delivered approximately 3200r to the paracervical area. (See Figure 1.)

This was immediately followed by the single insertion of intrauterine and intravaginal radium in the form of an Ernst applicator. (See Figure

2.) Usually 80 mg. of radium was left in for 72 hours, delivering a paracervical radium dose of 4520r. This contributed an additional dose of 1600r to the pelvic wall for a combined parametrial dose of 5100r. The total combined therapy was administered in 40 days.

Only the severe complications are considered. Nearly all of the patients treated surgically had granulomatous scarring of the shortened vaginal apex and most of the patients treated with irradiation had vaginal narrowing and scarring. Of the 66 patients treated with irradiation, 3 had fistulae and 5 had severe proctitis (considered severe complications). (See Table 1.) Of the 63 patients treated surgically, 31 had severe complications (renal nonfunction, hydronephrosis or bladder atony) while there were 8 fistulas. (See Table 2.) Where the patients had more than one complication, they are counted in each category. All of the patients are included in this

TABLE 1
SEVERE COMPLICATIONS SEEN IN PATIENTS
TREATED WITH RADIOTHERAPY
(66 Patients)

I. Fistulae	
Rectovaginal	2
Rectovaginal & uretero vaginal	1
Total	3
II. Severe diarrhea <i>without</i> proctitis	1
III. Radiation Proctitis	5
IV. Cystitis	3
V. Severe vaginal radiation reaction	1

group. Although 30 of them have been followed only 3 years, we feel that most of the complications will have occurred within that interval.

Of the 50 patients that were treated with irradiation that have been followed for more than 5 years, 35 are living with no evidence of disease. Of the 49 patients that were treated surgically, more than five years ago, 31 are living

TABLE 2
SEVERE COMPLICATIONS SEEN IN PATIENTS
TREATED SURGICALLY
(63 Patients)

I. Fistulae	
Vesicovaginal	4
Ureterovaginal	3
Urethrovaginal	1
Total	8
II. Urinary Tract complications:	
Nonfunction of kidney <i>not</i> due to tumor	4
Hydronephrosis and/or hydroureter	10
Infection	30
Bladder atony	18
Incontinence	10
(These complications occurred in 47 patients)	
III. Surgical damage to bladder, ureter or bowel ...	8
IV. Excessive operative blood loss (more than 1000 cc) and/or shock	11
V. Pelvic hematoma	6
VI. Miscellaneous (includes incisional hernia, wound dehiscence, pulmonary emboli, post op atelectasis, etc.)	10

NOTE: Where patients have more than one complication, they are counted in each category.

with no evidence of disease. These figures, however, do not reflect the effectiveness of therapy. Fourteen patients have either been lost to follow-up or died of unknown causes, and in an overall group of this limited size, such a segment can alter statistics drastically. A truer picture might be obtained if this group is eliminated, and only the results obtained in the groups with adequate follow-ups are analyzed. As can be seen from Table 3, the numbers of patients living with disease, and the number who died without evidence of cancer and those who died with evidence of can-

TABLE 3
FIVE YEAR SURVIVAL RESULTS OF PATIENTS
TREATED SURGICALLY AND
WITH RADIOTHERAPY
(99 Patients)

	Radiation rx	Surgery rx
Died <i>with</i> evidence of disease	5	4
Died <i>without</i> evidence of disease	3	3
Died of unknown causes	3	0
Living <i>with</i> evidence of recurrence ...	2	2
Lost to follow-up	2	9
Total dead or lost to follow-up	13	16

cer are almost identical in both the radiation treated group and the surgically treated group. It is felt that this reflects an actual five-year survival rate of approximately 85-90 per cent for both groups of patients.

Although the number of patients in this study is small and doesn't lend itself to statistical accuracy, several things have been learned. This is a random study done in a single institution and supervised by the same investigators throughout. The size of the two groups of patients is almost identical and the survival rates are almost identical. The one striking difference in the two groups is the complication rate. The complication rate in the surgically treated group is nearly four times as great as in the group receiving irradiation. This in itself may make one select irradiation therapy as the treatment modality of choice.

★★★

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REFERENCE

1. Newton, M.; Hickman, B. T.; and Bolten, K. A.: Carcinoma of the Cervix: Treatment and follow-up, JMSMA 2:279 (June) 1961.

New Dimensions in Emergency Medical Rescue Services

B. J. SHELL, PH.D.; J. E. CLARK, PH.D.; and P. Y. NICHOLAS
State College, Mississippi

THIRTY-EIGHT MISSISSIPPI counties are now covered by the life-saving network of the Coordinated Accident Rescue Endeavor-State of Mississippi (Project CARE-SOM). This project utilizes three helicopters that are manned by trained attendants and pilots working in conjunction with ground ambulances, and it employs the latest in communications advancements. Funded by the National Bureau of Highway Safety, Project CARE-SOM is directed by Mississippi State University.

The overall purpose of any emergency medical care system is to save lives and reduce the probability of disabling injuries. The elements involved are transportation, communications, and treatment. To date, attempts to improve emergency medical care systems have been directed toward the elements rather than toward improvements to the total system.

The great loss of life, the widespread injury, and the total economic loss to the nation make highway crashes a pressing national problem. Highway crashes are the most common cause for death in the age group of 15 to 35 years and are among the first three causes of death of all age groups from the first year of life to middle age.

Project CARE-SOM focuses upon the post-crash scene since, in spite of the efforts to pre-

vent them, crashes still occur in ever-increasing numbers. The National Research Council states that many accident victims die needlessly because most ambulances in the United States lack

Utilizing three helicopters, Project CARE-SOM (Coordinated Accident Rescue Endeavor-State of Mississippi) now covers 38 counties. The authors discuss the operation and results of the project, which is funded by the National Bureau of Highway Safety, U. S. Department of Transportation and operated by the Engineering and Industrial Research Station of Mississippi State University.

the equipment, supplies, and trained attendants for quick, adequate emergency care to the critically injured. The council says that one-third of the more than 53,000 traffic deaths a year occur at the scene, in the ambulance, or within minutes after arrival at a hospital. Safety experts estimate that if the same speed of evacuation in Vietnam were adapted to highway or other accidents in the United States, it could mean a 20 per cent reduction in deaths.

Several doctors who work in emergency rooms were recently asked, "If you could request one change in the present system of receiving accident victims, what would you request?" Their unanimous reply was that they would like to be in-

B. J. Shell, Ph.D., P.E., Acting Vice-President for Research at Mississippi State University, is project director of CARE-SOM; J. E. Clark, Ph.D., P.E., Assistant Professor of Civil Engineering at the University, is principal investigator, and Patricia Y. Nicholas is Editor for the Engineering and Industrial Research Station at the University.

formed that casualties were coming in and the nature of their injuries. Project CARE-SOM provides this vital communication link. Communication between the hospital and ambulance, as well as properly and adequately trained attendants, must be a part of any emergency medical care system.

A letter dated January 29, 1970, received at the CARE-SOM office is representative of many received since the beginning of this demonstration project. The letter expresses the happy thankfulness of a teen-age boy's parents at his full recovery. The son had been in an automobile accident and was taken to a small central Mississippi hospital for observation of head injuries. In a short time, he became delirious and went into a coma. He was immediately sent to the University Medical Center by helicopter. His rapid transfer to the Medical Center where he received immediate treatment is credited with his recovery with no permanent brain damage.

The inter-hospital transfer is only one phase of

Project CARE-SOM. The vital role of the helicopter is to provide the most rapid aid possible—whether it be from the accident scene to the receiving hospital or from one hospital to another. Project CARE-SOM is seeking to determine the extent to which helicopter ambulance service can be coordinated with existing ground ambulance service in rural areas to provide a more comprehensive and effective emergency rescue and treatment capability.

TABLE 1
MISSISSIPPI COUNTIES PARTICIPATING
IN PROJECT CARE-SOM

<i>Southern Zone</i>	<i>Central Zone</i>	<i>Northern Zone</i>
Jasper	Smith	Humphreys
Jones	Simpson	Sharkey
Covington	Copiah	Washington
Wayne	Claiborne	Holmes
Jefferson Davis	Warren	Sunflower
Marion	Hinds	Bolivar
Lamar	Rankin	Tallahatchie
Forrest	Scott	Leflore
Perry	Leake	Montgomery
Greene	Madison	Grenada
Pearl River	Yazoo	Yalobusha
Stone		Carroll
George		Attala
Harrison		

Helicopters and coordinated communication systems have been demonstrated with excellent results in urban areas as rescue and evacuation vehicles for highway accident victims. In rural areas, the paucity of accidents and the vast area in which they might occur team together to present a formidable challenge to the helicopter and ground ambulance system. Mississippi was chosen as a rural area for testing the demonstration project.

A demonstration grant from the National Bureau of Highway Safety, U. S. Department of Transportation, is funding the Coordinated Accident Rescue Endeavor-State of Mississippi. Representatives of the Governor's Highway Safety Program are cooperating in an advisory function.

DEMONSTRATION AREAS

Three demonstration areas containing 38 counties were selected. See Table 1 for a listing of the counties for each zone. A 50-mile radius zone was selected for each area based upon the operating capabilities of the helicopter. Headquarters for the zones are as follow: Northern Zone—Greenwood; Central Zone—Jackson; Southern Zone—Hattiesburg. One helicopter, capable of ac-

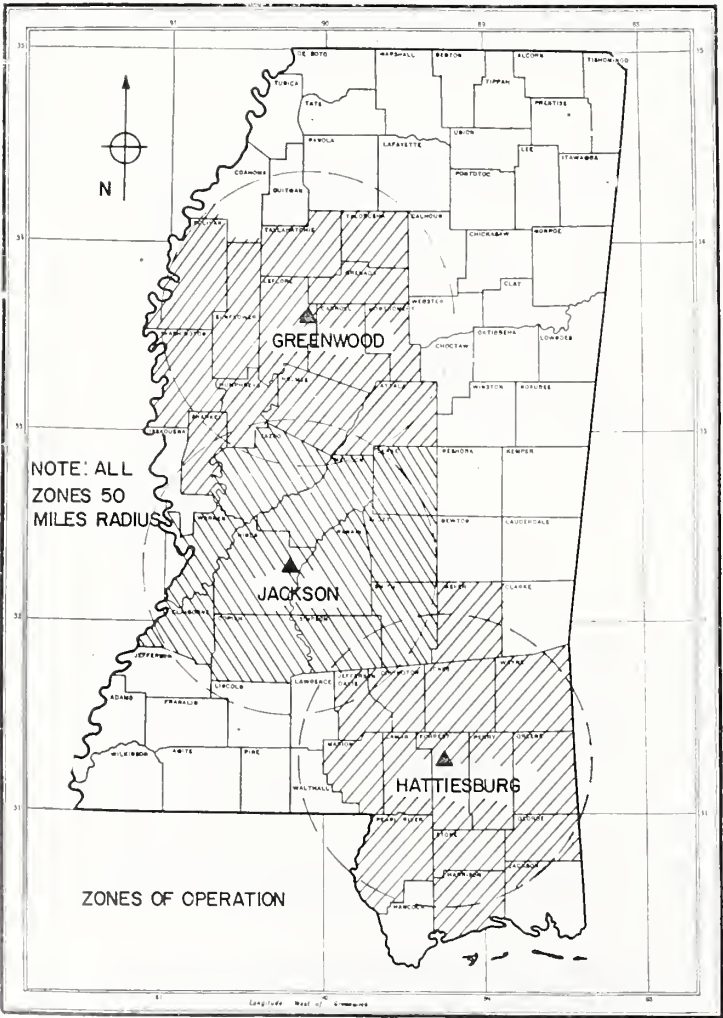


Figure 1. This map shows the thirty-eight Mississippi counties in three zones of operation which Project CARE-SOM covers in the Emergency Medical Rescue Service.



Figure 2. Emergency helicopter air and ground crews demonstrate technique of boarding patient in specially designed litters. High position of rotary

wing permits loading with power on for immediate takeoff.

commodating a pilot, medical attendant, and two litters, is on alert in each of the zones during a 14-hour period each day. The 14-hour period was statistically determined and covers the time period during which about 85 per cent of the traffic accidents in the selected zones occur. The project is designed so that the helicopter will serve as a supplement to the ground ambulance service. An effective emergency medical care system cannot exclude provisions for ground service. Weather conditions are recorded on each flight, and the helicopter performance is evaluated.

CONCEPT OF OPERATION

Here is an outline of the general concept of operation that Project CARE-SOM employs:

1. Participating ground ambulance companies with trained crews and coordinated communication systems are on alert at all times in each of the zones. The helicopter team is on alert during selected hours of the day and night.

2. When an accident occurs, either the helicopter or ground ambulance, according to plan

and location, is dispatched by the highway patrol.

3. The trained attendants rescue and perform triage upon arrival at the scene and then evacuate the injured to the nearest facility capable of providing definitive treatment.

Two-way radio communications are essential, and the radio communication needs of this project include: 1) two-way radio communication between helicopter dispatcher and helicopter; 2) two-way radio communications between helicopter, ground ambulances, and emergency service wards of hospitals participating in the project; 3) two-way radio communications between the helicopter and highway patrol vehicles at the accident scene; and 4) two-way radio communications between the helicopter and surrounding airports.

In addition, the section of U. S. Highway 49 between Collins, Mississippi, and Wiggins, Mississippi, is equipped with roadside emergency telephones spaced approximately five miles apart. These telephones are located at interchanges or crossover points so that they are available to

motorists approaching from either direction. The phones are trunked to three main lines; the removal of the handset from any one of these telephones will place the calling party in voice contact with the dispatcher at the Hattiesburg Highway Patrol Station.

UMC TRAINING COURSE

Before initiating operations, all participating ambulance and helicopter attendants received a training course organized and taught by the University Medical Center under the direction of Dr. William A. Neely. The purpose of this training course was to teach ambulance personnel resuscitative techniques and to train personnel in the correct procedure to minimize injury during transport of the injured to medical care. The medical aspects of the course were covered in approximately 17 one-hour periods and presented to small groups of students.

Data is being collected by participating hospitals and ambulance services for the evaluation of several areas of the emergency medical system. Time and distance records are being com-

pared to evaluate the time-response characteristics of the emergency medical system.

NUMERICAL SCALES

With the aid and advice of cooperating physicians, numerical scales have been devised which (a) indicate the casualty's condition at the time he arrived at the hospital, and (b) indicate, for helicopter transported casualties, the seriousness of a delay in reaching emergency facilities. These two scales when used in conjunction with the time history of the accident (from 1 above) indicate the benefit which might result from the use of a helicopter.

The attendant on each mission is required to file a report and the doctor receiving the case at the hospital also provides a report that includes a description of the actual injuries suffered in the accident. It is expected that from a comparison of these reports (a) the relevance of the attendant training program to the actual practice may be evaluated and (b) subject areas in the training program needing modification will be identified.

After three months of operation, over 1600 data forms have been returned and are in the



Figures 3 and 4. Highway Patrol trainees simulate emergency patient transportation in near-real-life exercise on Interstate Bypass at Jackson. Helicopter is seen in background with Patrol unit and auto wreck



positioned on scene with "injured" manikin. Right, wide access port shows litter configuration for multi-patient transportation in helicopter.

process of being evaluated. Over 400 life-saving missions were flown during the same period. With 115 radio units installed and operating in hospitals, ambulances, helicopters, and Highway Patrol Stations, the communications network is being evaluated and improved.

Through Project CARE-SOM, the Engineering and Industrial Research Station of Mississippi State University is fulfilling its obligation of

service to the populace of the state. It is hoped that this demonstration project will serve as a model for greater effectiveness in emergency medical care, benefiting not only the people of Mississippi, but the people of the entire United States as similar programs are put into effect in other areas of the nation. ★★★

P. O. Drawer DE (39762)

NOT BY BREAD ALONE

The CHAMPUS Department at the state medical association headquarters office sometimes finds it necessary to write program beneficiaries for supplemental information to substantiate claims payment. One such letter went to the wife of a serviceman at Meridian.

Replying tardily with the information, the lady apologized for a delay explaining that "apparently, my four-year-old son or two-year-old daughter ate your form letter but with no apparent ill effects."

Clinicopathological Conference XCVI

ALVIN E. BRENT, JR., M.D., and LOUIS SCHIESARI, M.D.

The Department of Pathology

Mississippi Baptist Hospital

Jackson, Mississippi

A 51-YEAR-OLD, white man was admitted to the Baptist Hospital because of fever. He had been well until two months prior to admission when he injured the gum of the right maxilla with a denture. He had not been able to eat satisfactorily since. He consulted an oral surgeon who detected a red spot in the gum of the right maxilla. A culture taken from this area yielded *B. coli* and beta hemolytic streptococcus organisms. The lesion cleared up on Neomycin treatment. At this time the patient developed severe diarrhea, thought to be gastroenteritis, which was completely controlled after a week of treatment. Since then the patient had continued to run fever periodically, usually higher in the late afternoon. He felt weak, and a few days before admission he was noted to be slightly jaundiced. Past history was not remarkable and not contributory.

On admission the temperature was 101.4°, the pulse 76, and blood pressure 140 systolic, 80 diastolic. The physical examination revealed a well-developed, well-nourished, white man with a slightly icteric color of skin and conjunctivae. There was a raw, whitish, sore area on the right upper gum and soft palate. The heart and lungs were not remarkable. The abdomen was protuberant. No definite liver edge was palpable although the patient was extremely tender over this area. No masses or other organs were palpable. There was suggestion of free fluid in the abdomen.

The hemoglobin was 9 gm. per cent and the WBC 8,000, with 72 polys, 23 lymphocytes, and 5 per cent monocytes. The urine was nega-

tive. Serum chemistry gave the following results: glucose 105 mg. per cent; BUN 13 mg. per cent; calcium 9.4 mg. per cent; cholesterol 185 mg.; phosphorus 4.1 mg. per cent; uric acid 2.7 mg.

The patient in this month's CPC is a 51-year-old white man admitted because of fever. He had been well until two months before admission when he injured the gum of the right maxilla with a denture. He had not been able to eat satisfactorily since. Other symptoms included severe diarrhea, weakness and slight jaundice.

per cent; total protein 6.3 gm. per cent; albumin 3.25 gm. per cent; LDH 200 mU. (Normal 90-200); SGOT 125 mU. (10-50); alkaline phosphatase 465 mU. (30-85); total bilirubin 1.6 mg. per cent; direct bilirubin 0.74 mg. per cent (normal less than 0.26 mg. per cent); ammonia 68 mcg. per cent (18-48 mcg. per cent).

X-ray studies revealed normal lungs and GI tract, a moderately enlarged heart, and failure of the gallbladder to concentrate the dye. No stones were found. The patient was discharged, improved, after 12 days.

While at home he consulted an internist who felt that the patient had cirrhosis of the liver and treated him accordingly. At this time the patient stated that his alcohol intake had always been very moderate, and that his dietary routine

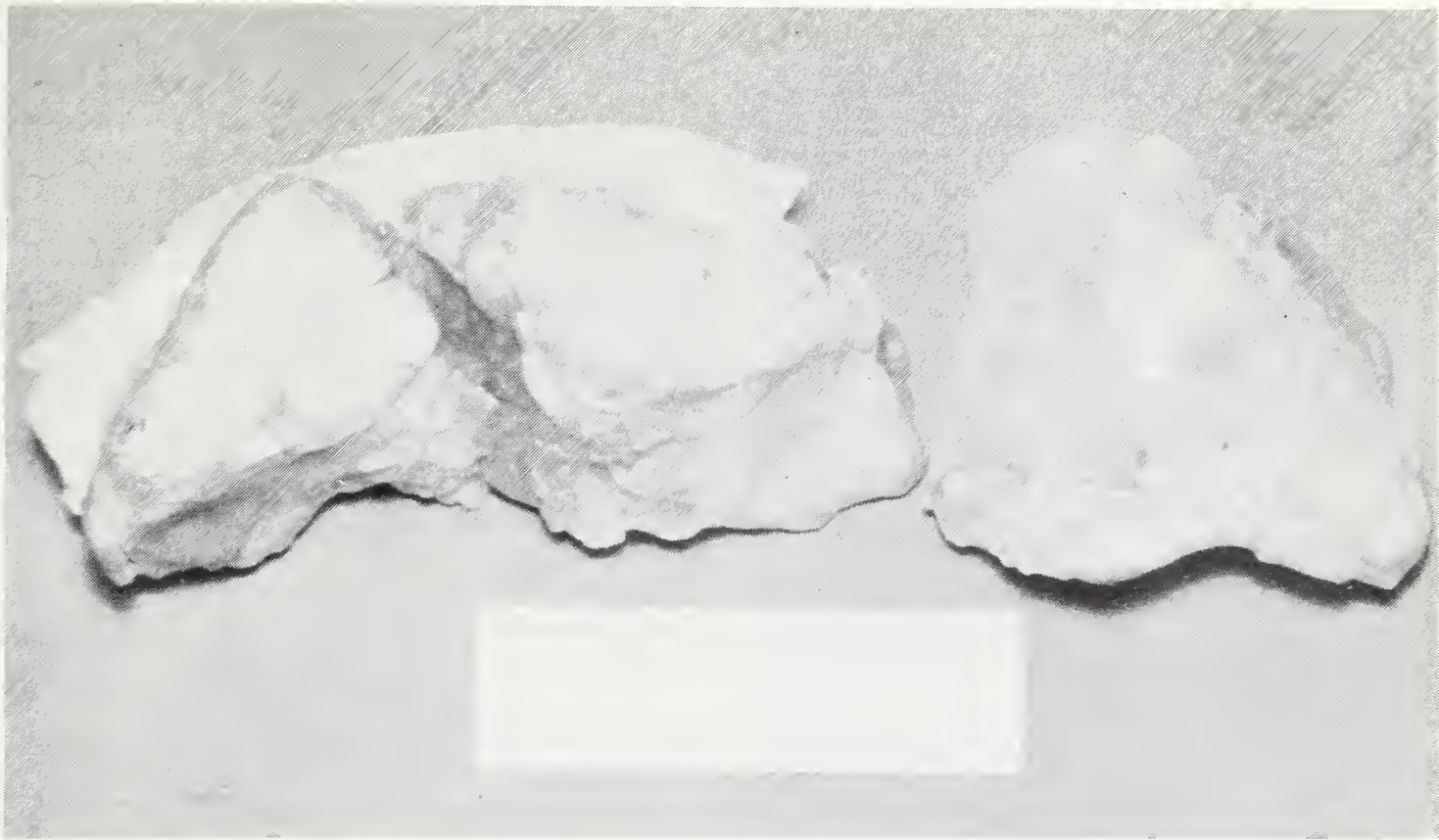


Figure 1

had not been good in that he had eaten very little of high protein foods.

He was admitted to the Baptist Hospital three months after discharge because of progressive weakness and worsening of his oral lesions. The temperature, which on admission was 102° , maintained an intermittent character during the entire hospitalization. Examination of mouth by the oral surgeon revealed a large area in the right maxilla and posterior soft palate that appeared very much to be a malignancy. A biopsy was to be performed as soon as the patient's condition permitted.

LABORATORY FINDINGS

The WBC was 12,300, with 68 segmenters and 13 bands. The serum chemistry showed approximately the same abnormalities found in the previous admission. The BSP retention was 24 per cent, and serum electrophoresis revealed a normal pattern. The overall appearance of a liver scan was believed to be quite compatible with either cirrhosis or fat infiltration of the liver. X-rays of upper GI tract and chest were within normal limits. The spleen was seen to be enlarged.

The patient complained of dizziness, of cramps in arms and legs; he was frequently nauseated, and vomited occasionally. The attending physician thought the patient was on an impending hepatic encephalopathy although no foetor he-

paticus could be detected. The patient expired 11 days after admission.

DISCUSSION

Dr. Alvin E. Brent, Jr.: "This case is somewhat confusing. I am not at all certain of the diagnosis. We'll review the protocol for anyone who might not have read it. This is a 51-year-old, white male who was admitted here because of fever. He had been well until two months before admission when he had some type of injury to his right maxillary area. Since that time he had had some difficulty eating. An oral surgeon detected a lesion, and this area was cultured. A coliform organism and hemolytic streptococcus was isolated. I think likely that these two organisms were not of too much importance in his overall illness. This lesion cleared on Neomycin treatment. I assume this was oral therapy.

"He developed a severe diarrhea, and this was probably due to Neomycin which can cause diarrhea either due to suppression of the normal bacterial flora or through direct toxicity to the mucosa of the bowel. The diarrhea cleared after some type of treatment, not specified in the protocol. Following this he continued to be febrile. He developed some weakness, and was stated to have become jaundiced several days before admission here. His history was said to be otherwise unremarkable.

"At the time of admission his temperature was 101.4, pulse 76, and blood pressure 140/80. This pulse represents a relative bradycardia which at least would make us consider several possibilities. One of these would be some type of *Salmonella* infection such as typhoid fever; also, tularemia and brucellosis. A number of viral illnesses are associated with relative bradycardia. Also, any disease which is associated with increased intracranial pressure could cause this.

PHYSICAL EXAMINATION

"On physical examination, he was noted to be well developed and to be icteric. We have a lesion in the right upper gum and soft palate described as erythematous and ulcerative. Heart and lungs were negative. The abdominal examination revealed tenderness over the liver area and was felt to have some ascites. No masses were noted. Laboratory data showed that he was anemic; his white count was normal, and he had a normal differential. This would tend to lead us away from some type of bacterial infection.

"Urinalysis was negative. Chemistries were: glucose 105 mg. per cent, BUN 13 mg. per cent, calcium 9.4 mg. per cent, cholesterol 185 mg. per cent, phosphorus and uric acid both normal. Proteins were normal. Then we are given several abnormal liver tests. The LDH was at the upper

limits of normal. He had some moderate elevation of the SGOT, and a fairly marked elevation of alkaline phosphatase. His total bilirubin was 1.6, with a slight elevation of the direct reacting fractions. It is interesting that with a total bilirubin of 1.6 that he clinically was described as being jaundiced. Usually this can't be detected until 2.5 or 3 mg. per cent or so, but perhaps the little elevation of bilirubin and the anemia together, at least, made him appear jaundiced.

"The blood ammonia was elevated. There is very little other than liver disease that would elevate the blood ammonia. On looking into this, about the only other things to consider would be therapy with ammonium chloride and use of the diuretic, Diamox.

"X-rays of the lungs and GI tract were essentially normal. He is described here as having moderate cardiomegaly. Later this was not mentioned. The gallbladder did not concentrate the dye, and then it is mentioned that there were no stones found. I'm not sure whether later maybe it was visualized or just what, but you wouldn't expect to find stones if the gallbladder didn't pick up the dye anyway.

"After 12 days he was discharged and said to be improved. Then he saw another physician, and this physician apparently made a diagnosis of cirrhosis and treated him 'accordingly.' Then we are given additional history and told that his alcohol intake had been moderate and his pro-

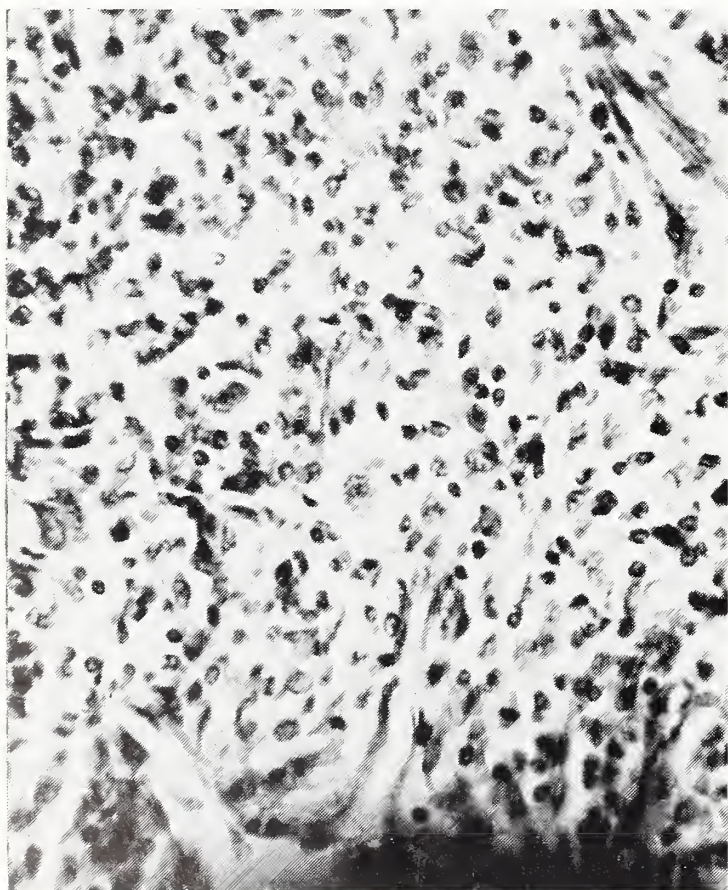


Figure 2

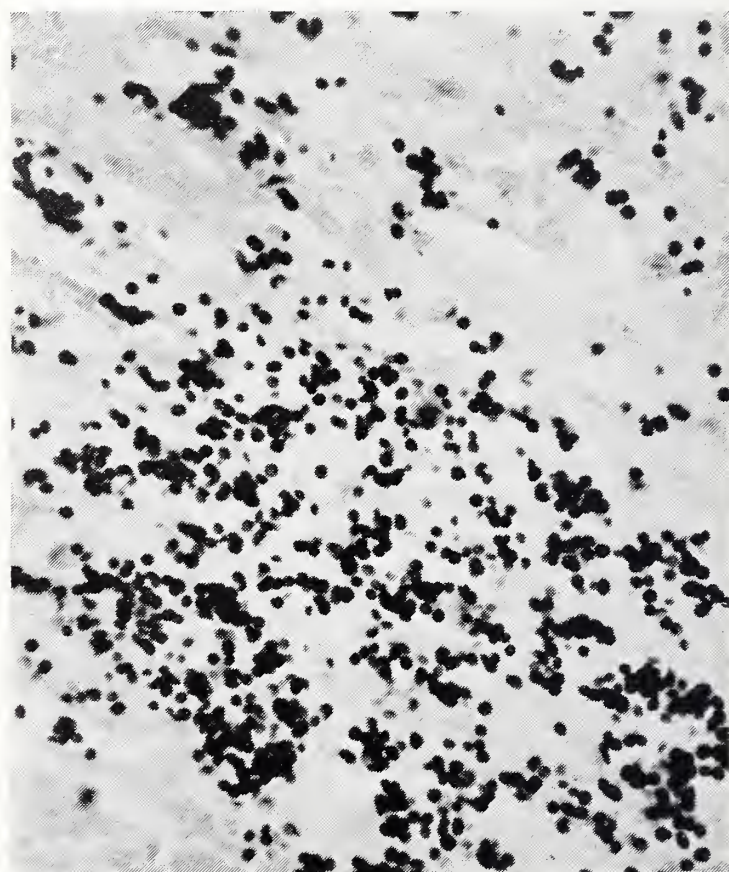


Figure 3

tein intake apparently had not been very good. Three months after his discharge he was readmitted to this hospital. He was still febrile and remained febrile during hospitalization. From the description there had been some worsening of the oral lesions, and apparently they were suspicious of a malignancy. A biopsy, as the protocol says, was to be done.

"His serum chemistries were said to be the same as on his previous admission. His BSP was markedly abnormal at 24 per cent, but then it is said that the serum electrophoresis showed a normal pattern which is perplexing since we are considering some type of chronic infectious problem and considering some type of liver disease, both of which would give an abnormal electrophoretic pattern. A liver scan was said to be compatible with cirrhosis or fatty infiltration. X-rays of the gastrointestinal tract and chest were normal. He was said to have splenomegaly. He then developed nausea and vomiting. He was felt to be in impending hepatic coma, and expired some 11 days after his admission to the hospital.

DISEASE POSSIBILITIES

"So, we are presented with the case of a middle-aged male with an illness which totals approximately some five months. This illness is characterized by a febrile course and by involvement of the oropharynx and, also, probably the liver and questionably the central nervous system. It would seem that the main thing then to consider in the differential would be some type of destructive process involving the oropharynx and either a liver disease related to this or possibly two separate diseases; one of the oropharynx and another disease of the liver.

"We are at somewhat of a disadvantage in that we don't have a lot in the way of positive information which makes a differential somewhat large. I think we have to consider a chronic infectious process as the number one choice. First, let's consider the fungal diseases which could produce this picture. Actinomycosis would seem to be a good choice. I'll mention some more about this later. Nocardia is another fungal disease that conceivably could give this picture; however, we would expect to have pulmonary involvement, and we have a negative chest x-ray in this case. I think we also would have to consider blastomycosis; however, the absence of skin lesions and, again, the negative chest x-ray would be against this diagnosis. Coccidioidomycosis could give this picture; however, this is the wrong area of the country, and we aren't given a history of his traveling West, and again the negative chest x-ray

would be against this. Histoplasmosis, I think we would also have to consider; however, again, the big thing against this, I believe, would be the negative chest x-ray. I think we would also have to consider tuberculosis as a possibility. The area of involvement in the oropharynx would make you think of bovine tuberculosis; however, the rarity of this, I think, would be just about exclusive in itself.

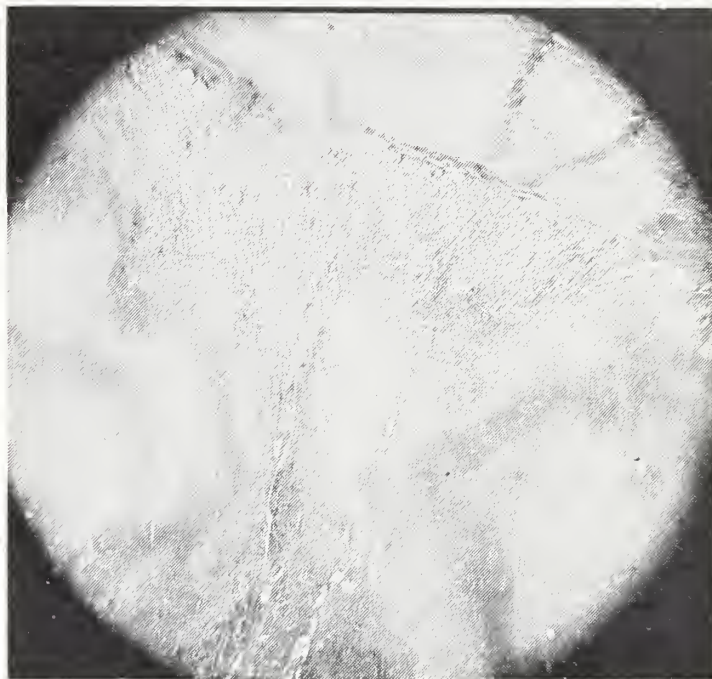


Figure 4

"Now, another big group of diseases to consider would be malignancies. A squamous cell carcinoma arising in the oropharynx with hematogenous spread to the liver would be possible; however, this would be a very unusual mode of spread for this type tumor. Another malignancy, I think, to consider would be an adenocarcinoma perhaps arising in one of the nasal sinuses with both local recurrence and hematogenous spread.

GRANULOMATOUS DISEASES

"Then, the last group of diseases to consider would be one of the destructive granulomatous diseases which we'll mention a little bit more of later. Each of these categories could be associated with liver involvement, or he could have any one of these diseases and a separate disease of the liver.

"I believe I would favor an infectious process as the number one choice, and of the infectious diseases I would favor actinomycosis. I'll try to support that a little bit. The febrile nature of his illness would fit well the non-healing oral lesion, and the abdominal involvement all would fit well with actinomycosis. Actinomycosis is a normal inhabitant of the oral cavity and gastro-

intestinal tract. Infection usually follows some type of trauma, and in this case we are given a history of trauma secondary to apparently poor-fitting dentures. Another common way for it to occur is following dental extractions.

"Actinomycosis does spread to bone, with production of osteomyelitis, and this could explain the elevated alkaline phosphatase as could actinomycosis involving abdominal organs or the liver. Actinomycosis also could involve the mediastinum, the lung, and chest wall. Also, as I have mentioned, there is frequently abdominal involvement. Abdominal actinomycosis often follows an appendicitis or perforation of an abdominal viscus. Abdominal involvement usually presents with an abdominal mass and draining sinuses over the abdominal wall, so that it bothers me that in this case there is no description of masses and certainly no draining sinuses over the abdominal wall.

"Central nervous system involvement with actinomycosis also occurs, and involvement of heart valves also can occur. You can suspect the diagnosis of actinomycosis by the finding of granules termed sulfur granules which drain from the lesion. They have a characteristic microscopic appearance. The diagnosis should always be confirmed, however, by culture. At this time there are no good skin tests for actinomycosis.

ACTINOMYCOSIS

"I would favor actinomycosis as the number one choice, probably with abdominal involvement, possibly with central nervous system involvement, and possibly with some other widespread dissemination. As a second choice, perhaps actinomycosis involvement of the oropharynx and an unrelated liver disease such as Laennec's cirrhosis. As a third choice, I would favor one of the malignancies which were mentioned.

"As for the last group of the diseases, the destructive granulomatous diseases—I'll just mention these. Lethal mid-line granuloma is a disease of unknown etiology, characterized by a chronic course with gradual destruction of fascial structures. Glanders is a bacterial disease transmitted to man from horses which also is characterized by a chronic cellulitis and destruction of fascial structures. Other diseases, which should be mentioned but are less likely, are syphilis, systemic lupus, and lymphoma. Any one of these could be associated with chronic destruction of mucous membranes. If anyone has any further thoughts, I would be happy to hear them."

Dr. Louis Schiesari: "At the autopsy table a large piece of tissue was removed for microscopic study from the widely ulcerated area involving the right maxilla and palate. The liver weighed 3,000 gm. It was pale gray, with a smooth, shiny capsule. The cut surface was again pale gray, not remarkable, nothing suggesting fatty changes, passive congestion, cirrhosis, or metastatic disease. The spleen weighed 500 gm. It was very soft, friable, with a dark red cut surface, characteristic changes of acute passive congestion. The adrenals (Figure 1) weighed 75 gm. each. They were symmetrically enlarged, hard in consistency, a tannish-pale color, again not suggesting metastatic disease. These were the main changes found at the autopsy table.

LYMPH INVOLVEMENT

"There was, in addition, moderate edematous enlargement of abdominal lymph nodes, and the wall of the large intestine was slightly thickened and edematous. The microscopic examination (Figure 2) of the mouth lesion showed an overwhelming proliferation of histiocytes characterized by large cytoplasm. A large number of these cells contained in their cytoplasm minute pin-point bodies which on the routine H and E section appeared of a purple-red color. These were diagnosed as histoplasma organisms.

"In order to confirm the diagnosis on H and E sections the Gomori's methenamine silver special stain was applied. This method (Figure 3), which stains specifically the capsules of the histoplasma capsulatum and of many other fungi because of the rich amount of mucopolysaccharide in the capsules, is extremely useful for the ultimate diagnosis in tissue sections. A microscopic section of one of the adrenal glands (Figure 4) showed the profound destruction brought about by the invasion of this organism. Only here and there a thin rim of cortical adrenal tissue was encountered.

LIVER CHANGES

"The liver deserves special mention because of its anatomical and functional changes. The microscopic examination of the liver sections showed massive inflammatory infiltration of the portal areas, the inflammatory cells being chiefly lymphocytes with a light sprinkling of polys and eosinophils. There were also patchy infiltrations of the same type of cells in the lobules, but the hepatocytes were well preserved. In spite of the multiple sections taken, no necrosis or granulomatous reactions were encountered and no organisms detected by special stains.

"In summary, the diagnosis was a severe, non-specific hepatitis, a result of portal drainage from the large intestine which was severely inflamed, with organisms also being found. It is interesting to note the peculiar behavior of the enzymes in this case. The LDH was within normal limits and was again in successive determinations; the SGOT was moderately increased which is not diagnostic since in many types of liver damage we expect such a rise. But the alkaline phosphatase was extremely high, even higher than in any type of complete extrahepatic biliary obstruction. In this case the direct bilirubin was only slightly elevated, and from this finding we can rule out completely a biliary obstruction.

"This peculiar pattern of slightly increased direct bilirubin and marked rise of the alkaline

phosphatase is very characteristic of a discrete, patchy, nodular lesion in the liver, either metastatic or granulomatous. But this was not the case. It is now well established that of the four fractions of alkaline phosphatase (hepatic, intestinal, placental, osseous) the liver fraction is produced in the liver itself chiefly by the cells lining both the small and large biliary ducts. In this liver, because of the massive inflammatory reaction in the portal spaces immediately surrounding and infiltrating the biliary ducts, there was inevitably also some disruption of the lining cells with spilling of their enzymes into the blood stream. The result was then a high level of alkaline phosphatase in the patient's serum." ★★★

1190 N. State St. (39201)

LIKE FATHER, LIKE SON

A fifth grader was caught reading a "girlie magazine," and the teacher marched him off for a talk with the principal. The principal gave the boy a severe talking to. "Now," he commanded, "you sit right down and write a letter to your mother telling what you've done." The kid sat down and started his letter. "Dear Mother: This morning I took Dad's magazine to school and. . ."

Radiologic Seminar XCV

Multiple Myeloma

JUNE G. BLOUNT, M.D.
Jackson, Mississippi

MULTIPLE MYELOMA, or plasma cell myeloma, is the most common malignant primary bone tumor. This tumor of bone marrow is usually of multicentric origin, and occasionally develops in extrasketal sites. Plasma cell myeloma may initially appear as a localized lesion, but eventually becomes widespread throughout the skeletal system. Microscopically, the involved marrow is replaced by the abnormal plasma cells, and as the myelomic process expands, it destroys the adjacent tissue.

The entity is usually seen in individuals over forty years of age, and bone pain is the most frequent complaint. Pathologic fracture, anemia, weakness, neuropathy, paraplegia due to compression of the spinal cord, and recurrent pneumonia may be frequent.

The multiple bone lesions, Bence-Jones proteinuria, hyperproteinemia, and the characteristic plasma cells in the bone marrow form a diagnostic combination. Paper electrophoresis of serum and urine detects protein abnormalities characteristic of multiple myeloma. Associated findings may include anemia, hypercalcemia, renal function impairment, atypical amyloidosis, and increased serum uric acid.

Prognosis is variable in the individual case, but the mean survival in patients with multiple

myeloma is only nine and a half months from the time of diagnosis, and 19½ months from the onset of the first symptom (2). Single focus myelomas live longer, but eventually die of disseminated disease.

RADIOLOGIC FEATURES

Myeloma usually presents as multiple areas of discrete, round, punched-out osteolytic defects with no reactive sclerosis or periosteal reaction. Less frequent manifestations include a single lesion, or diffuse osteoporosis, or rarely, sclerotic foci. Occasionally, a myeloma lesion may cause expansion of the cortex or appear honeycombed. Typical defects may be absent during the early phase in 25 per cent. Ultimately, 90 per cent will demonstrate one or more osseous changes.

Bones most frequently involved are the skull, thoracic cage, spine, pelvis and proximal extremities. Multiple osteolytic defects are commonly found in the parietal and frontal bones of the skull (Fig. 1). Ribs may appear honeycombed, or expansile, with soft tissue masses bulging into the lung fields. The outer end of the acromion is frequently involved, even when remaining portions of the clavicle and scapula are uninvolved. Diffuse osteoporosis may lead to collapse of vertebral bodies (Fig. 2). Multiple vertebrae may present a bubble-like appearance, with extension into the vertebral processes, and

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, University
Medical Center.

Figure 1. The skull in multiple myeloma presents multiple punched-out osteolytic defects with no reactive sclerosis. This 52-year-old female had widespread skeletal lesions.

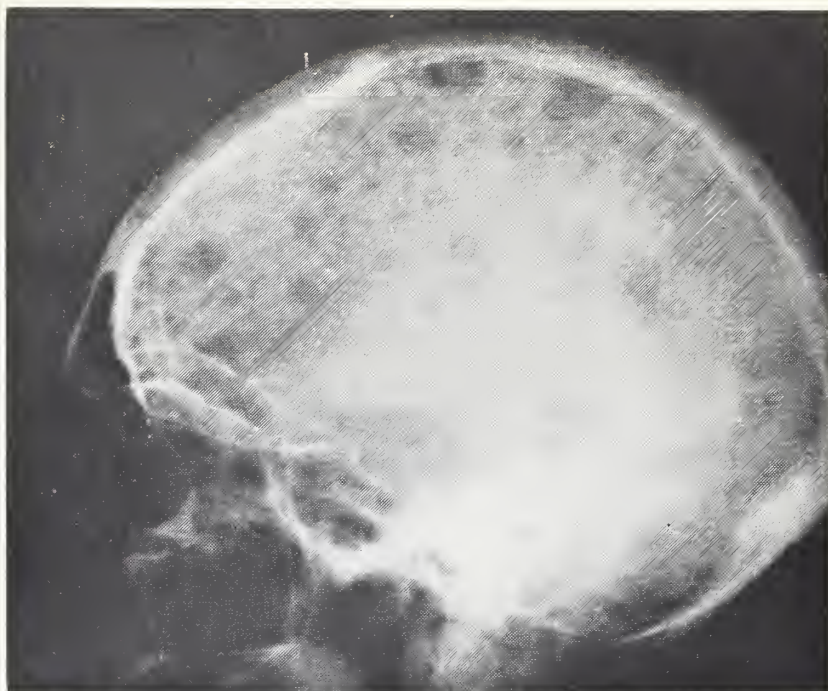


Figure 2. The entire cervical spine is involved with diffuse osteolytic lesions. The body of the fourth cervical vertebra has collapsed and there is sharp angulation of the spine in this 44-year-old male.



associated paraspinous soft tissue masses. In the long bones the lesions may enlarge, coalesce and lead to pathologic fracture of the femur or humerus. In the pelvis, small and large lytic defects are common (Fig. 3).

The radiographic findings may be indistinguishable from metastatic carcinomatosis or hyperparathyroidism.

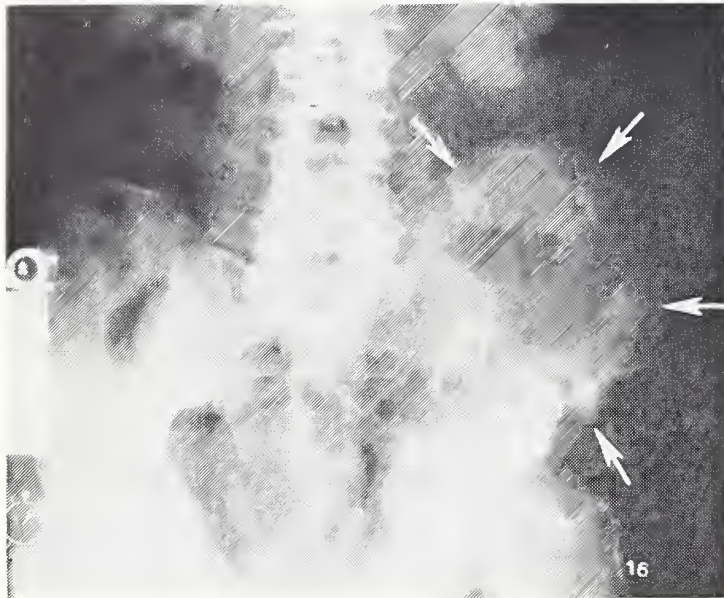


Figure 3. A pathological fracture extends through the large osteolytic lesion in the left iliac wing. The pubic rami and femoral neck are involved. This 73-year-old male presented with a pathological fracture through a lytic lesion in the distal humerus the previous year.

Excretory urography is generally considered to carry some risk in patients with myeloma, with the occasional development of acute renal failure following the procedure. This complication is attributed to tubular obstruction resulting from the aggregation of protein, maximal precipitation occurring between pH of 4.5 and 6.0 (4). Dehydration in preparation for urography predisposes to the precipitation of myeloma protein in the tubules. Although copious hydration may help prevent the development of anuria, the need for urography should be carefully evaluated in patients with known myeloma, as it is impossible to determine prior to roentgenography which patient will develop anuria. (3).

★★★

2500 North State Street (39216)

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VENGEANCE IS MINE

Three motorcycle bums, replete with leather jackets, boots, and beards, swaggered into a truck stop restaurant and ordered beer. Noticing a truck driver eating, they snatched his steak away, grabbed his bread, and threw his cup of coffee on the floor.

The truck driver said nothing, got up from his seat, and paid his bill with a smile. When the three cycle bums finished their beer, they commented to the cashier: "That truck driver isn't much of a man, is he?"

"No," replied the cashier, "and he isn't much of a truck driver, either. When he left, he ran over those three motorcycles parked outside."



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 21-25, 1970, Chicago, Clinical Convention, Nov. 29-Dec. 2, 1970, Boston. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Southern Medical Association, 64th Annual Meeting, Nov. 16-19, 1970, Dallas. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

STATE AND LOCAL

Mississippi State Medical Association, 102nd Annual Session, May 11-14, 1970, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Robert P. Henderson, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday, April and First Wednesday November, 2:00 p.m., Clarksdale. Walter T. Taylor, P.O. Box 1237, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. C. Hal Cleveland, P.O. Box 1018, Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, April and October. Cherie Friedman, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. James E. Booth, Eupora, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. M. Howell, 139 Kirkwood St., Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, June, September, and December. Donald E. Dore, Singing River Hospital, Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. W. B. White, Medical Arts Bldg., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.



The President Speaking

Past and Future: The Task Ahead

JAMES L. ROYALS, M.D.

Jackson, Mississippi

AS WE MAKE PLANS for the state convention in Biloxi and as I write this, my last editorial as President of the State Medical Association, it seems only natural to reflect on the events of the last year.

The year has been dominated by two sessions of the state legislature which considered many bills of major importance to medicine, the foremost of which was Medicaid. While in general we were warmly received by the Legislature, it became painfully apparent during the year that we have lost much of the rapport that we formerly enjoyed. With big government, both state and federal, moving massively into the health care field, it is urgently necessary that we do some fence mending with our friends in the Legislature.

The second reflection which comes to mind is that controls on medicine were on-rushing from outside sources; and these controls are coming in large part because of our own reluctance to exercise a proper police of our own ranks. A mechanism, through peer review committees, is being set up to correct this. Our own self-interest demands that it be effective. If we are to retain the free-enterprise system of medical care, we must continue to prove it to be worthy.

In order to successfully meet the efforts of those who would make the health care team a vassal of the state, it is necessary that all physicians actively participate in organized medicine. We have a democratic organization which needs to be constantly upgraded and improved so that the unified voice of medicine will be loud and clear. We have a good organization. To meet our responsibility to the public, let us work to make it better.

Lastly, it is with deep appreciation that I thank the members of the State Medical Association for the warmth with which Mary Alice and I have been received in our travels about the state.

★★★



The Family Practice Specialist: Medicine's New Man

I

MY HUSBAND has practiced medicine for 20 years," the wife of a Mississippi family physician recently observed with whimsical humor, "and now they are going to give him an examination to see if he is qualified to be a general practitioner."

This is not an unusual reaction to the concept of medicine's newly-emerged discipline, family practice, replete with certifying board, specialty society, the blessings of AMA, and a fistful of credentials which may change the organization of care delivery. Some have scoffed at the very idea of "certifying a man to do everything" when it takes up to five years to know something about a single specialty. It is in this critical appraisal of family practice that the key to understanding of the concept may lie.

For one first thing, the diplomate of the American Board of Family Practice shall not have demonstrated total proficiency in the 19 other specialty disciplines. He, above all physicians readily recognizes that, and he will depend heavily on his fellow specialists in the care of his patient as he does today. Only he will do it in a different manner and context of professional approach. His is an *inclusive* rather than *exclusive* specialty, and he is a sort of third-generation

generalist. Explaining this, Dr. Vernon Wilson, vice president for Academic Affairs of the University of Missouri, says that "his approach to medicine will be built on the foundation of yesterday's country doctor and today's general practitioner, but developed from that foundation into something different."

That something different is what we must understand and appreciate. This new breed of M.D. could be the answer to growing problems in organizing the delivery of medical care.

II

Among words of praise flowing from the eloquent pens of today's writers are characterizations of the pathologist as medicine's indispensable man, of the transplant surgeon as the scientist ahead of the astronauts, of the internist as medicine's infallible detective, and on to the anesthesiologist as the comforter who has made the surgeon successful. Frankly, about the most written of late about the general practitioner is that he is the vanishing American. Now he promises to re-emerge as a vital, exciting quantity with a horizon of service beyond most hopes: He intends to treat people instead of things.

The new specialty board came to full term and delivery with not a few antepartum compli-

cations. The AMA House of Delegates, whose endorsement was crucial, didn't buy the package without knowing the contents. The *Ad Hoc* Committee on Education for Family Practice, a body of AMA, labored long and hard with the medical educators, the Advisory Board to the Medical Specialties, the AMA Council on Medical Education, and state medical associations. The American Academy of General Practice made a reasoned decision on the entire idea, not without lively and even stormy debate.

AAGP defines the family specialist as a physician who:

- Serves his patient as the physician of primary contact, the portal of entry into a better-organized health care system.

- Makes an evaluation of total health care need, treating some conditions himself and referring the patient to other specialists as necessary while maintaining care continuity.

- Accepts responsibility for continuous and comprehensive care while acting as the coordinator of services.

- Views the patient's medical requirements within the context of the environment, the family unit and the community.

This specialist, then, is as much of an advocate as a physician. Dr. Wilson compares the family physician to an attorney on continuing retainer as opposed to a source of one-time, episodic service. He must emphasize preventive services more than curative services within the family unit if his new role is to become more than words.

III

All of this adds up to a new kind of medical education, and this is a knotty problem for the specialty. There must be students, competent teachers, and specialized departments in medical schools. Educators must be won over to the cause, say representatives of family practice, because too few of the schools have even begun to shape a curriculum meeting the residency essentials. A few prophets of gloom feel that an insufficient number of students will be interested, even when the new departments are established. More feel that there are plenty of medical students inclined toward family practice and that all they need is the vehicle.

Nor can the nation's 70,000 generalists already in practice be overlooked, let alone relegated to a lower rung on the medical ladder. There is a job to do in postgraduate education, including the selling of the new concept, if the discipline is to unite rather than fragment. Since nobody gets

certification under a grandfather clause, today's general practitioner has the dual tasks of qualifying himself and carrying the colors forward for a training mechanism.

The family practitioner, already established, has 10 years to achieve certification, but if he has been in practice for at least six years and can show that he has satisfactorily completed 300 hours of postgraduate work acceptable to the American Board of Family Practice, he is deemed eligible to sit for the examination. A medical educator who has been on the job for six years is similarly eligible. The first examination was conducted in February of 1970, a scant year after the new specialty saw the light of day.

IV

Everybody is talking and writing about the delivery of medical care, the system, its organization, financing, and mostly, its problems. Some go so far as to say that there isn't a delivery system at all. Many mistake medical care financing as a delivery system, when this is only a part. Hard-line proponents of prepaid group practice—closed panels to most of us—argue that organization is everything and that under group practice, financial problems take care of themselves.



"Doctor Quigley?—About that sheep's kidney you put in me . . ."

Probably nobody is entirely correct on the matter. There is a delivery system, but anyone who has any knowledge of it understands that it is straining at the seams with manpower shortages, spiraling costs, overburdened facilities, and a growing population of consumers who are demanding more services. The extension of the financing base through Medicare, Medicaid, and growth of health insurance and prepayment has exacerbated these woes, and now supply and demand economics are getting some of the financing mechanisms in hot water.

Forward-thinking medical men, not necessarily the liberal left decrying traditional delivery patterns, believe that the organization of care is destined to change in the 1970's. We shudder—not for ourselves but for our patients—when we think of political “solutions” in national compulsory health insurance, because the inevitable squeeze on finances must influence quality and quantity of care.

This is a roundabout way of saying that a care organizer *within* the private practice structure might be the answer. He would make an assessment of need, treat what he can and should, and call in another specialist where and when indicated. But he would maintain the continuity and have the competence to do so. Moreover, if he did his job in preventive care, then at least some need for drastic, episodic service might be avoided.

This is admittedly an ideal view, but the new specialist might just be a key to organization, prevention, and the safety valve on rising costs. But, we think it appropriate, within the framework of private care delivery. Carried to the logical conclusion, this is the antithesis of bureaucracy, the end result of just about everything the government has arrogated unto itself.

Family practice in this new perspective has not been hastily conceived, and it makes the most of the useful past while looking ahead to make a good thing better. The medical historian may someday write that this development of the 1960's was American medicine's strongest forward thrust in its most difficult days.—R.B.K.

Part 1-B Is a Two-way Street

Distress and unrest is growing among many physicians who care for patients under Part 1-B of Medicare. Some are beginning to wonder how serious the government is about paying a just and reasonable fee for needed medical services.

And this isn't an infrequent quirk, either, because a developing pattern clearly indicates otherwise.

A respected component of the state medical association, the Northeast Mississippi Medical Society, was sufficiently concerned to take formal action over “arbitrary treatment” of physicians' claims by the Tupelo office of the Travelers Insurance Co., unanimously adopting a resolution of protest during a regular meeting.

More than a handful of physicians in the south and southeastern areas of the state have raised their voices in protest over the handling of Part 1-B Medicare claims at the Hattiesburg office. And there are more—more physicians and more instances of protest.

Chief among complaints recorded is imposition of limitations on care, such as replying that one visit to a physician every two weeks is sufficient for treatment of a given condition. The squeeze on fees, now pegged at the 75th percentile of 1969 levels, often shows up in strange contrast to the initially unctuous policy of paying usual and customary charges based on prevailing levels in a community or socioeconomic area.

The Mississippi State Medical Association is firmly on record as condemning overutilization of any medical care financing mechanism. It supports peer review, fair and impartial application of the usual and customary concept under which adjustments of fees can be made, and professional judgment implicit in professional responsibility. These are not just pretty words, empty of content, and uttered to get a high-sounding but sterile policy on the record. These are serious expressions of warranty upon care delivery assurances, and the association cannot regard lightly any action by a medical care financing mechanism which accepts the commitment but ignores the judgment.

Even more distressing are some actions in processing unassigned Part 1-B claims where the carrier's obligation ends with payment of the allowable amount to the beneficiary. There are recorded instances of the carrier's advising beneficiaries that their responsibility to the physician has been satisfied.

The JOURNAL has only recently observed editorially that the government is inclined to strain at a gnat while swallowing a camel. Most of the incidences cited are gnats compared to the camel of concomitant hospital charges. But then again, the physician is a single entity, devoting long hours to care of his patients, and the easy target for the claims examiner's blue pencil.

The association has no reservations about interpreting “reasonableness” in care delivery. But this is a two-way street where the traffic rules do

not permit a traveler to drive on both sides. This has been made clear in meetings of the association's Health Insurance Benefits Advisory Committee with representatives of HEW, the Social Security Administration, fiscal intermediaries, and the Part 1-B carrier. There are indications that the association has become increasingly concerned over these distressing developments. Physicians have made a sincere commitment, and they expect others to do no less.—R.B.K.

The Nelson Syndrome and Pill Complications

Sen. Gaylord Nelson (D., Wis.), the solon accused of "causing 100,000 unwanted pregnancies" with the one-sided hearing on oral contraceptives, may have triggered another series of phenomena. The Association for Voluntary Sterilization reports that 100,000 persons a year are requesting permanent sterilization. Three out of four applicants are men.

Blue Cross plans in 30 states pay hospital costs for inpatient sterilization procedures, mostly for medical reasons. Medicaid pays in 35 states on the same basis. CHAMPUS universally pays for sterilization for medical reasons, every vasectomy for husband where the procedure is contraindicated but necessary for the wife. The state medical association's CHAMPUS Department reports that vasectomy is becoming more frequent under the program.

Still another development growing out of the Nelson hearings on the pill is an upsurge in sales of mechanical contraceptives. One manufacturer of diaphragms said that demand is up 500 per cent for his product. Another mechanical contraceptive maker announced the first mass market consumer advertising campaign with purchase of space in *Playboy*, *Ebony*, and *Modern Bride*.

The recently-ordered package insert for patients in oral contraceptives may undermine usage further, bringing more unusual developments. All of this comes in the face of compounded problems in the population explosion, growing welfare programs, and strains on medical resources.

When the consensus of reasoned medical opinion holds that benefits of oral contraceptives far outweigh any risks inherent in their use, Sen. Nelson has performed a disservice to the public.

He intensifies many of the toughest problems confronting the Congress of which he is a member. He has made use of scare tactics, the most unscientific approach possible to any issue, eroding scientific credibility and public confidence. This is the Nelson Syndrome which may be correctly described as an insidious entity of doubt capable of exacerbating social ills and accelerating economic debilitation.—R.B.K.

Medical Corpsmen, New Manpower Pool

Learn a new word: MEDIHC. It is an acronym for Military Education Directed Into Health Careers, and it's all about medics who are separated from the military services. Traditionally, hospitals and other medical institutions have found that former military medical corpsmen leave the service with useful and often immediately applicable skills. The manpower shortage is making medicine take a closer look at these servicemen.

Operation MEDIHC is a joint program of the Departments of Defense and HEW aimed at utilizing the skills of former service personnel who were assigned to medical duties. A number of medical societies have expressed the belief that former medical corpsmen make the best "physician's assistant," equal to the baccalaureate degree



"It all depends . . . What type of hospitalization plan do you have?"

trainees now coming out of Duke and the University of Colorado.

Nearly 30,000 medical corpsmen are discharged by the armed services each year. Even small utilization of this significant pool will be immensely helpful in easing the health service manpower squeeze. Last year, it was demonstrated that 15 per cent of these separatees were immediately employable in the health care field. Another survey discovered that 60 per cent of the corpsmen were interested in obtaining additional education. The 1969 scoreboard shows that 19 per cent of those separated went into health service jobs full time, while 22 per cent went into combination work-training, i.e., student technologist, situations. This is an impressive salvage of scarce talent.

The program is a brainchild of AMA which first offered the Department of Defense medical advisory services in health careers. Now, pre-separation counseling is being offered soon-to-be-discharged medics at 214 domestic military installations. Clearinghouse centers have been established to exchange information on individual qualifications and educational requirements for higher qualification on discharges.

The program promises to increase the number of former corpsmen entering the civilian health care field by 5 per cent per year through 1975. This is a meritorious program, deserving of medicine's support and assistance.—R.B.K.

The Cost Dilemma of Hospital Services

Ready for a shocker? Then try this: Hospital costs in 1969 were twice as much as Franklin D. Roosevelt's national budget in 1940!

Last year, according to the American Hospital Association, the nation's 5,820 community hospitals experienced a cost increase of 17.2 per cent over 1968 for a total of \$17 billion. That's just under a third of the sum total of health care costs and a rise of \$2.5 billion over the preceding year. Informed observers had predicted a rise of 15 per cent, but they were a little conservative.

AHA says that supplies and equipment are the villains, rather than personnel, although the costs of people went up 12 per cent for the institutions. Translated into costs per patient day, this means that the average was up \$9.15 over 1968 for a whopping national mean of \$68.41. But translated again onto the patient's bill, it is nearer \$75 per day.

The outlook isn't bright, either, for the rate of rise is seen as a constant for two more years "as the hospitals' wage scales catch up with other industries," according to AHA. Back in the mid-1960's when economic savants predicted that hospital *per diem* costs would hit \$100 per day by 1975, most folks doubted or simply laughed. Nobody is laughing now as we perceive just how much the economists were off. Already, many metropolitan hospitals have *exceeded* \$100 per day.

In 1969, 28.4 million Americans were admitted to hospitals, up about 2 per cent over 1968. Medicare admissions increased over 6 per cent, an understandable outcome of the growing segment of seniors and of the longer life. The average patient stay was 8.1 days, the same as 1968, while the average stay for Medicare and other over-65 patients, decreased to 13 days from the previous 13.4 days.

Outpatient departments in hospitals are growing by leaps and bounds, racking up 118 million visits in 1969. Hospital employment went up by 100,000 workers to a record 1.8 million.

Hospitals are challenged to discover and apply management innovations to put the brakes on the costs of care. Gradients of care intensity are more urgently needed than ever before, both for conservation of high-priced, short-supply manpower and for the sheer economics of how the bill can be paid. The not-so-funny joke that only the very rich and the very poor can afford to be in the hospital is a little more aphoristic than facetious.—R.B.K.



POSTGRADUATE CALENDAR

May 28, 1970

CARDIOPULMONARY RESUSCITATION TRAINING PROGRAM

Limited to 15 physicians, this one-day course is designed to train MRMP-CPR instructors in cardiopulmonary resuscitation techniques. The course, presented jointly by the Mississippi Heart Association and the University of Mississippi School of Medicine, will feature individual instruction in cardiac and respiratory resuscitation using the manikins and care of the manikins. An attorney will speak on laws involving cardiac arrest. Dr. Leonard Fabian, anesthesiology chairman, is

POSTGRADUATE / Continued

coordinator for the seminar. Registration will be at 8:30 a.m. in the School of Nursing.

CIRCUIT COURSES

EASTERN CIRCUIT

MERIDIAN—May 5—Session 3

Briarwood Country Club, 6:30 p.m.

Session 3—Complications Associated with Saddle Block Anesthesia in Obstetrics, Dr. Donald Sherline

The Management of Edema Related to the Kidney, Dr. Ben B. Johnson

FUTURE CALENDAR

May 11-14

MISSISSIPPI STATE MEDICAL ASSOCIATION

May 28

CARDIOPULMONARY RESUSCITATION
TRAINING COURSE



PERSONALS

JOHN K. ABIDE of Cleveland spoke at the March meeting of the North Delta District Nurses' Association on the importance of the doctor-nurse and nurse-patient relationships for quality patient care.

GEORGE ALLARD of Flora, PAUL B. BRUMBY of Lexington, WILLIAM H. PARKER of Heidelberg, TOM HERRON MITCHELL of Vicksburg, HOWARD D. CLARK of Morton, and JOHN G. ATWOOD of Meridian have been re-elected to active membership in the American Academy of General Practice. Re-election signifies that the physician has successfully completed 150 hours of accredited postgraduate medical study in the last three years.

G. SPENCER BARNES of Columbus assumed the presidency of the Mississippi Heart Association at the annual one-day assembly in Jackson.

F. C. BOREN of Mantachie was honored on his 93rd birthday by the Pilot Club of Mantachie. Dr. Boren still sees patients and has been practicing for almost 60 years.

THERESA L. R. BUCKLEY of Biloxi has been re-elected president of the Altrusa Club of Biloxi. Dr. Buckley limits her practice to ophthalmology.

R. G. BURMAN and D. C. RAINES, III, of Gulfport announce the removal of their offices, The Woman's Clinic, to Medical Arts Plaza at 1213 Broad Avenue.

L. J. CLARK, JR., of Vicksburg announces the removal of his office to 2837 Clay Street. Dr. Clark limits his practice to internal medicine.

JOHN DOWNER of Lexington is heading the 1970 educational and fund-raising Crusade of the American Cancer Society in Holmes County.

A. P. DURFEY, JOHN R. DURFEY, and A. P. DURFEY, JR., of Canton have moved into their new office building located on Country Club Road near the Madison General Hospital.

ELIZABETH FERRINGTON of Jackson has received the Service Award of the American Legion for many years of faithful service to hospitalized veterans. Dr. Ferrington was on the staff of the Jackson VA Center for many years before recently retiring.

HARRY FRYE of McComb has been elected to another term on the South Pike School Board. Dr. Frye won handily over his opponent 982-234.

On pages 18 and 67 of the 1970 Mississippi Directory of Physicians, LUTHER H. FULCHER of Jackson was listed incorrectly as Luther H. FULTON.

WENDELL N. GILBERT, SR., of Taylorsville announces the opening of his office for family practice in the old Smith County Bank Building.

H. LAMAR GILLESPIE, MARCUS HOGAN, RAMSAY O'NEAL, and WILLIAM R. RAULSTON, all of Hattiesburg, have initiated a scholarship program for two nursing students at the University of Southern Mississippi School of Nursing.

JOHN N. HARRINGTON and JAMES T. DOSTER of Columbus announce the formation of a partnership for the practice of obstetrics and gynecology at the Medical Arts Center, 221 7th Street North.

ELMER J. HARRIS, JAMES M. PACKER, ROBERT P. HENDERSON, and OTTIS G. BALL, all of Jackson, announce the association of FRED A. LEWIS in the practice of radiology at 316 Medical Arts Building and at the Mississippi Baptist Hospital.

MARY E. HAWKINS of Jackson announces the

removal of her office to Suite 205, Medical Arts Building, 1151 North State Street for the practice of obstetrics and gynecology.

JAMES H. HENDRIX, JR. of Jackson participated in the recent annual convention of the Southeastern Society of Plastic and Reconstructive Surgeons in New Orleans. Dr. Hendrix is current president of the society.

DAN KEEL, JR., of Brookhaven was among the District Chairmen, Commissioners, and Executives of eight districts of the Andrew Jackson Council, Boy Scouts of America, who met in Jackson recently.

DEWEY LANE of Pascagoula has been named Jackson County's Outstanding Citizen of the Year. He was chosen from a field of 17 outstanding citizens nominated for the annual B&PW award.

WILLIAM A. LONG, JR., of Jackson addressed the Central Mississippi Chapter of the Mississippi Association of Medical Assistants on adolescent medicine recently. Dr. Long limits his practice to ephibiatics.

M. S. LOVE of Gulfport has been elected a member of the Salvation Army Advisory Board and was installed at the annual banquet and awards presentation.

JAMES L. McLAIN of Tylertown announces the relocation of his offices in the Doctor's Clinic in the old Walthall Hospital building.

WILLIAM C. MUNN of Mendenhall has moved into his new clinic building.

JOE GLENN PEELER, JR., of Shaw has been selected for inclusion in the 1970 edition of Outstanding Young Men of America.

ANTONE W. TANNEHILL, JR., and FLOYD L. LUMMUS of Tupelo announce the opening of new offices at 806 W. Garfield.

JAMES WAITES of Laurel has been named chairman of the Public Health Committee of the Laurel Chamber of Commerce's 1970 "Forward Laurel" program.

JOHN R. YOUNG, JR., of Natchez has been elected Sergeant-At-Arms of the Natchez Rotary Club.



The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association.

DURFEY, ALLAN PERCY, JR., Canton. Born Canton, Miss., Aug. 12, 1937; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned Confederate Memorial Medical Center, Shreveport, La., one year; surgery residency, same, July 1, 1963-June 30, 1967; elected Jan. 6, 1970, by Central Medical Society.

GIFFORD, WILLIAM BURTON, Eupora. Born Prentiss County, Miss., March 20, 1930; M.D., University of Mississippi School of Medicine, Jackson, 1960; interned University Medical Center, Jackson, Miss., one year; pediatric residency, same, July 1, 1961-June 30, 1962; elected Dec., 1969, by North Central District Medical Society.

GORE, EDWARD KIRKHAM, Houston. Born Houston, Miss., July 17, 1938; M.D., University of Mississippi School of Medicine, Jackson, 1964; interned Carswell AFB Hospital, Ft. Worth, Tex., one year; elected Dec. 3, 1968, by Northeast Mississippi Medical Society.

HAMERNIK, ROBERT JOSEPH, Jackson. Born Elbowoods, N. D., Nov. 29, 1938; M.D., University of Mississippi School of Medicine, Jackson, 1964; interned University Hospital and Hillman Clinics, Birmingham, Ala., one year; surgery residency, University Medical Center, Jackson, Miss., 1965-66; anesthesiology residency, same, March 1, 1968-Feb. 28, 1970; elected March 3, 1970, by Central Medical Society.

LYNCH, WILLIAM FREDERICK, JR., Jackson. Born Jackson, Miss., Jan. 30, 1934; M.D., University of Mississippi School of Medicine, Jackson, 1959; interned San Diego Naval Hospital, Calif., one year; radiology residency, St. Albans Naval Hospital, Long Island, N. Y., March 1, 1963-March 1, 1966; elected Jan. 6, 1970, by Central Medical Society.

McFADDEN, JOHN WILBUR, West Point. Born Monroe, La., June 26, 1939; M.D., University of Mississippi School of Medicine, Jackson, 1965; interned University of Texas Medical Branch, Galveston, one year; pediatric residency, same,


July 1, 1966-June 30, 1968; elected March 10, 1970, by Prairie Medical Society.


OZBORN, CHARLES ALLEN, Eupora. Born Union, Miss., May 26, 1939; M.D., University of Mississippi School of Medicine, Jackson, 1964; interned Mississippi Baptist Hospital, Jackson, one year; elected Dec., 1969, by North Central District Medical Society.

WALKER, BILLY LAKE, Tupelo. Born Utica, Miss., July 2, 1937; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned University Medical Center, Jackson, Miss., one year; pathology residency, same, July 1, 1963-June 30, 1965; pathology residency, University Hospital, Lexington, Ky., July 1, 1965-June 30, 1967; elected Dec. 9, 1969, by Northeast Mississippi Medical Society.

WILDER, SAMUEL JOBE, JR., Jackson. Born Columbus, Miss., Aug. 18, 1935; M.D., University of Mississippi School of Medicine, Jackson, 1964; interned Duval Medical Center, Jacksonville, Fla., one year; orthopaedic surgery residency, Mississippi Baptist Hospital, Jackson, July 1, 1965-June 30, 1967 and University Medical Center, Jackson, Miss., July 1, 1967-June 30, 1969; elected Jan. 6, 1970, by Central Medical Society.



 CANNON, RUSSELL HOWELL, Bruce. M.D., University of Mississippi School of Medicine, Jackson, 1958; interned Moses H. Cone Memorial Hospital, Greensboro, North Carolina, one year; surgery residency, University Medical Center, Jackson, Mississippi, July 1, 1959-July 15, 1963; died March 19, 1970, age 37.

 ROBERTSON, MILTON HAROLD, Corinth. M.D., University of Louisville School of Medicine, Kentucky, 1942; interned Kosair Crippled Children's Hospital, one year, and Norton Memorial Hospital, one year; died March 13, 1970, age 58.

MSBH Screens Greene County for Medicaid

Greene County is the second county in the state to come into a State Board of Health program for the screening of children entitled to medical care under the state's Medicaid program.

The program got under way in Greene County April 16 and will continue with screening clinics each first Thursday and third Thursday at the county health department at Leakesville.

Dr. Frank M. Wiygul, Jr., director of the Division of General Health Services, State Board of Health, said some 400 young people, most of them between five and 18 years old, will be screened.

He said the children will be screened for heart defects, vision defects, hearing defects, tuberculosis, anemia and other abnormal conditions.

Dr. James Totten, county health officer for Greene County, and Mrs. Myrnis McCoy, R.N., public health nurse for the county, will coordinate the program at the local level.

Terry Beck, coordinator for the program at the state level, said parents of eligible children will be notified in advance of the date and time for them to bring the children in for screening.

"We urge all parents to come in at the exact time designated in the notice," said Beck. "Because of space limitations, we can only accommodate a certain number of people at any one time."

The State Board of Health began the program March 12 in Warren County and plans ultimately to extend the program statewide, as fast as circumstances permit.

"We selected Greene County as the second county," said Beck, "on the basis of need, and on the basis of the county's good nursing service and its ability to follow up on people to be screened."

The State Department of Public Welfare is working with the State Board of Health in the program, since screening is primarily for those receiving "Aid to Dependent Children" assistance.

Certification for Medicaid is made through the State Department of Public Welfare. Most of those included in the medical screening program will be under 18.

State Board of Health officials have estimated that approximately 90,000 children are eligible for the screening.



Book Reviews

Urinary Tract Infection in Childhood and Its Relevance to Disease in Adult Life. By Victoria Smallpiece, M.A., M.D., F.R.C.P. 142 pages with illustrations, St. Louis: The C. V. Mosby Company, 1969. \$9.50.

This concise little book deals with problems of recurrent urinary tract infections in childhood and its sequelae in adult life. The author follows the subject in chronological order dealing first with etiology, then diagnosis, treatment, course and prognosis.

Her discussion of the problems of vesicoureteric reflux is interesting. The author points out that the correlation between reflux and infection is well documented and the "incidence of reflux in patients with pyelonephritis tends to rise with improvement in diagnostic techniques."

The effects of hydration and of osmolarity on host defence is discussed. While there is considerable volume of evidence that water diuresis increases the resistance of the kidney to infection, there are varying views on the reasons for this. She points out the work of Schlegel and Burden who believed that since a dilute urine will also reduce the concentration of sulphonamides and of urea, this is contraindicated. They consider that urea as found in concentrated urine is bactericidal. Other writers are in favor of increasing urine flow.

The author points out that urinary tract infection in the young child is more liable than any other common disease to be overlooked by the parents and misdiagnosed by the medical profession. Reasons for this include paucity of symptoms in some cases. "It cannot be too strongly emphasized that reinfection in the course of chronic pyelonephritis in children of any age can be completely symptom free."

Whether every child should have a full urological investigation including pyelograms, micturating cystourethrogram, pressure studies and lidoscopy at the time of the first attack is a matter of discussion. Most workers are in favor of at least the first two examinations.

The underlying theme throughout this book is the importance of diagnosis and treatment of recurrent urinary tract infections in children and, thus, avoiding the future sequelae of progressive renal failure and death.

JOEL L. ALVIS, M.D.

The Practice of Refraction, Eighth Edition. By Sir Stewart Duke-Elder, M.D., Ph.D., F.A.C.S. 329 pages with illustrations. St. Louis: The C. V. Mosby Company, 1969. \$11.75.

The author states in his preface that no revolutionary changes have appeared in the art of refraction since the seventh edition. This is true and is best evidenced by the fact that the preface and indeed each and every chapter is practically identical to its predecessor. Several new tables of a mathematical nature are added.

The art of refraction must first be preceded by a firm grounding in the principles of optics, the refractive system of the eye and the anomalies of refraction. The present text continues to provide clearly this essential information.

All the illustrations continue to use English (and outmoded English at that) instruments. The chapter on contact lens has been used again without a single alteration. This is unfortunate as important basic advances have been made in this particular area.

In summary, this slim text provides a good, inexpensive and generally complete introduction to that subject which occupies necessarily an important niche in the ophthalmologist's life.

RICHARD L. BLOUNT, M.D.

New Books Received

Manic Depressive Illness. By George Winokur, M.D., Paula J. Clayton, M.D., and Theodore Reich, M.D. 161 pages with illustrations. St. Louis: The C. V. Mosby Company, 1969. \$6.50.

Crisis Fleeting. Original Reports on Military Medicine in India and Burma in the Second World War. Compiled and Edited by James H. Stone. Office of the Surgeon General, Depart-

ment of the Army, Washington, D. C., 1969. \$3.75.

Symposium on Cancer of the Head and Neck. Edited by John C. Gaisford, M.D. 362 pages with 583 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$31.50.

The Vitreous in Clinical Ophthalmology. By Norman S. Jaffe, M.D., F.A.C.S., F.I.C.S. 300 pages with 334 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$32.50.

Personnel Administration and Labor Relations in Health Care Facilities. By James O. Hepner, M.H.A., Ph.D.; John M. Boyer, M.A.; and Carl L. Westerhaus, M.S. 370 pages. St. Louis: The C. V. Mosby Company, 1969. \$15.00.

Handbook of Psychiatry. By Philip Solomon, M.D., and Vernon D. Patch, M.D. 589 pages. Los Altos, Calif.: Lange Medical Publications, 1969. \$7.00.

Synopsis of Obstetrics. Eighth Edition. By Charles E. McLennan, M.D. with collaboration of Eugene C. Sandberg, M.D. 496 pages with 212 illustrations. St. Louis: The C. V. Mosby Company, 1970. \$9.50.

Current Diagnosis and Treatment. By Henry Brainerd, M.D., Marcus A. Krupp, M.D., Milton J. Chatton, M.D., and Sheldon Margen, M.D. 884 pages. Los Altos, Calif.: Lange Medical Publications, 1970.

Synopsis of Clinical Cancer. Second Edition. By Condict Moore, M.D. 267 pages with 37 illustrations. St. Louis: The C. V. Mosby Company, 1970. \$11.75.

Miss. House Commends MSMA

The House of Representatives of the State of Mississippi has commended the Mississippi State Medical Association in House Resolution No. 114.

The House expressed appreciation to MSMA members for services rendered during the 1970 regular session of the Legislature.

In the resolution adopted March 30 and signed by Speaker John R. Junkin, the legislators expressed special thanks for services doctors rendered during the recent siege of flu and colds and various other illnesses.

The state medical association operates the Emergency Medical Care Unit in the Capitol building with a registered nurse on duty. Physicians throughout the state volunteer to serve as Doctor of the Day during the legislative sessions.

Diabetes Association Reorganizes in State

The Diabetes Association of Mississippi has been reorganized to include lay members. National regulations of the association formerly limited membership to physicians.

Earl E. Lundy of Jackson is serving as first president of the new association and other officers include Dr. Karleen C. Neill of Jackson as president-elect, J. H. Sasser, Jr., of Carthage, vice-president, and Normer L. Gill of Jackson, treasurer.

Members of the board of directors are: Leslie L. Wilkinson, L. N. Sepaugh, W. Clif Shirley, Dr. Herbert G. Langford, Dr. Perrin H. Berry, Dr. W. Johnson Witt, Dr. L. Tate Carl, all of Jackson, and Dr. W. J. Huddleston of Hattiesburg.

Jaycees Collect Drug Samples for Vietnam

The Mississippi Jaycees have reported a successful initial drug collection in their Jaycee International Medical Supplies (J.I.M.S.) project for Vietnam.

A total of 8,000 pounds of medical supplies valued at between \$40,000-50,000, was collected from throughout the state, according to Dr. Robert L. Donald, Jr., of Pascagoula, J.I.M.S. state chairman.

The drugs, collected from doctors' offices, drug company representatives, hospital medical and surgical supplies, drug stores, and surgical supply houses, included antibiotics, vitamins, infant formulas and food supplements, and oral contraceptives.

A second J.I.M.S. drive began in April. Local Jaycees will collect drug samples, excluding amphetamines and barbiturates, from physicians. Hospital administrators are asked to contribute discarded but repairable medical and surgical supplies.

The supplies will be shipped to Project Concern, Inc., P. O. Box 2468, San Diego, Calif. This organization, headed by Dr. James Turpin, maintains hospitals in Vietnam and hospital ships in Hong Kong Harbor.

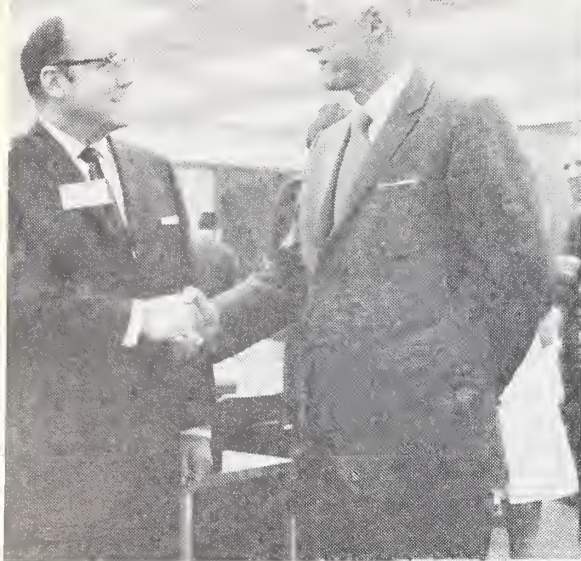
The Mississippi Air National Guard will fly the drugs and supplies from Jaycee headquarters in Jackson to the San Diego headquarters of Project Concern where they will be readied for shipment overseas.

THE NEW ADDITION to the headquarters building was opened with all officers and Board members present. Upper right, President James L. Royals, center, wields gold suture scissors to cut ribbon as President-elect Paul B. Brumby, left, and Virgil Priester, general contractor, assist. Bottom, W. R. Bob Henry, A.I.A., architect, right, presents keys to Building Committee, from left, Drs. William O. Barnett, Mal S. Riddell, Jr., and J. T. Davis.



WE OPEN YOUR ADDITION . . .



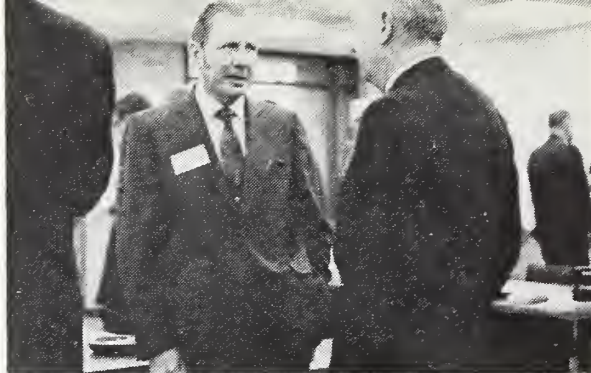


VIP's GRACE THE OCCASION . . .



ASSOCIATION LEADERS, VIP's, and just old friends—they saw the new addition and each other. Top from left, Dr. Royals greets Lt. Gov. Charles Sullivan; Miss Louise Lacey, executive secretary of GP Academy, chats with Dr. Ed Moak against background of receiving line with Dr. and Mrs. Royals and Dr. Riddell; and Dr. William E. Lotterhos describes new offices to Mrs. Gordon Dees (back), Auxiliary past president. Left top, Dr. and Mrs. Guy T. Vise inspect general office area, and, bottom left, Dr. and Mrs. James T. Thompson greet Dr. Louis C. Lehmann.

IT HAD ALL the trappings of a reception with the receiving line and silver punch bowl. Top right, Dr. G. Swink Hicks shows State Health Officer Hugh B. Cottrell around; center, Mrs. John B. Howell, Jr., presides over punch bowl with obvious approval of Dr. Howell; and lower right, Mrs. William O. Barnett talks with Dr. and Mrs. James O. Gilmore. Bottom, the ladies like their new office in the headquarters building, the first permanent Woman's Auxiliary home. From left, Mrs. Paul B. Brumby, immediate past president; Mrs. Mal S. Riddell, Jr., past president; Mrs. Curtis W. Caine, president-elect; and Mrs. Louis C. Lehmann, president.



THE LADIES OPEN AN OFFICE . . .





AMA AND STATE association staff representatives were on hand to see the leadership. Top left, Dr. Barnett has a word on business with AMA Field Representative Leon J. Swatzell, and center, Dr. Howard A. Nelson looks over records with association's Membership Director Cindy Sanders.

BETTER PLACE TO DO THE JOB . . .

ALLIED HEALTH professions were well represented among special guests. Lower right, Dr. and Mrs. Everett Crawford show Medical Care Plan Department to Physical Therapist J. T. Gilbert.



Heart Association Holds Annual Meet

The Mississippi Heart Association's 1970 Annual Assembly was held in Jackson April 2, concurrently with the Mississippi Heart Association Cardiovascular Seminar at the University Medical Center. The yearly event and Awards Banquet were attended by members, volunteers and physicians from across the state.

Elected officers for the coming year were Dr. G. Spencer Barnes of Columbus, president; Ernest G. Spivey of Jackson, president-elect; Dr. Frederick Tatum of Hattiesburg, vice-president; Aven Whittington of Greenwood, secretary; and Ray R. McCullen of Jackson, treasurer. Donald Bartlett of Como was the outgoing president.

Keynote speaker for the meeting was Dr. Jack W. Fleming of Pensacola, Fla., who spoke on "Coronary Care in the Community Hospital." Dr.

Fleming stressed the importance of the coronary care unit, mobile coronary care unit and emergency room nursing, and cited statistics to prove that many cardiovascular disease victims can be saved through the employment of recent medical innovations.

A panel of physicians addressed the delegates on high blood pressure. Moderated by Dr. J. Manning Hudson of Jackson, it was composed of Dr. T. D. Lampton, assistant coordinator of the Mississippi Regional Medical Program, who discussed "The Problem in Mississippi"; Dr. Herbert G. Langford, UMC professor of medicine, who summarized the "Status of Knowledge"; and Dr. John D. Wofford of Greenwood, who told "How Heart Volunteers Can Help."

Current programs in Cardiopulmonary Resuscitation were cited by Dr. W. L. Wood, Jr., of Tupelo, chairman of the CPR committee; and in "Heart Information for the Public" by John D. Holland of Jackson, newly elected member of the Mississippi Heart Board of Directors.



Viewing an exhibit on cardiopulmonary resuscitation during the Mississippi Heart Association Annual Assembly in Jackson are newly elected officers Ernest G. Spivey of Jackson, president-elect;

Donald Bartlett of Como, outgoing president; Dr. G. Spencer Barnes of Columbus, president; and Ray McCullen of Jackson, treasurer.

Dr. Magnuson Gets IMA Knudsen Award

Dr. Harold J. Magnuson was accorded the highest honor in the field of industrial medicine when the Knudsen Award was conferred upon him by the Industrial Medical Association, international society of physicians in industry. The award, which was established in 1939 by the late General William S. Knudsen, then President of General Motors Corporation, has been presented annually since that time in recognition of a physician who has attained distinction in the field of occupational medicine and hygiene. A bronze plaque, symbol of the honor, was presented to Dr. Magnuson at the business session of the association's 55th annual meeting held at The Palmer House.

The presentation was made by Dr. Duane L. Block, President of the association, and Physician-in-Charge, Rouge Medical Services, Ford Motor Company. Dr. Block acclaimed Dr. Magnuson's many contributions to occupational medicine and cited his accomplishments as an administrator, educator and writer.

Dr. Magnuson is Associate Dean of the School of Public Health at the University of Michigan, Ann Arbor. Until his recent appointment as As-

sociate Dean, he was chairman of the University's department of industrial health and Director of the Institute of Industrial Health. He first joined the University in 1962 following his retirement from the U. S. Public Health Service after 21 years as a Public Health Service Officer. He received his medical degree in 1938 from the University of Southern California and the degree of Master of Public Health in 1942 from the Johns Hopkins School of Hygiene and Public Health.

Among appointments Dr. Magnuson held with the Public Health Service were Director of the Venereal Disease Experimental Laboratory at Chapel Hill, N. C., and Chief of Operational Research for the PHS venereal disease program. For the two years prior to his retirement from the service, he was Chief of the Division of Occupational Health in Washington, D. C.

Dr. Magnuson is author or co-author of nearly 100 scientific articles published in medical and professional journals. Among his memberships, he is a Fellow of the Industrial Medical Association, the American College of Physicians, the American Public Health Association and the American Association for the Advancement of Science. He is a diplomate of the American Board of Preventive Medicine and a member of the Board for occupational medicine.

—The lowest priced tetracycline—nystatin combination available—



Wyeth Introduces New Packaging Concept

Wyeth Laboratories has introduced a new concept in unit dose packaging, called TUBEX® TAMP-R-TEL®, which discourages tampering and permits greatly improved control of injectable narcotics and barbiturates. TAMP-R-TEL is a major improvement in TUBEX, Wyeth's line of unit dose medications in pre-filled sterile cartridge-needle units.

The new TAMP-R-TEL package will soon be released for commercial use, and gradual turn-over of current TUBEX narcotics and barbiturates into TAMP-R-TEL is expected to be completed within the next few months.

The main features of the tamper-resistant package are transparent plastic packaging and individual cartridge slots with end-lock tabs.

According to L. J. Hymel, vice president, sales and promotion, the TUBEX TAMP-R-TEL concept is the result of extensive study and evaluation in the hospital setting. "Many hospital personnel have stated there is pressing need for better packaging and control of injectable narcotics and barbiturates," Hymel said. "The TAMP-R-TEL package was specially designed to provide such control. After months of clinical testing and analysis of TAMP-R-TEL in a number of hospitals, we are convinced it is a major innovation in unit dose packaging which will enable hospitals to significantly increase the security of these pilferage-prone injectables."

Key benefits of TAMP-R-TEL, Hymel says, include the following:

—When the end-lock tab is pulled off to release medication, the manufacturer's seal is permanently broken. This feature enhances package integrity and discourages pilferage.

—Individual cartridge slots permit release of a single TUBEX for unit dose dispensing. When the end-lock tab has been broken off, special design makes it almost impossible to replace.

—The clear plastic package permits immediate visual identification (front or back), and im-

proved control through "at-a-glance" accountability.

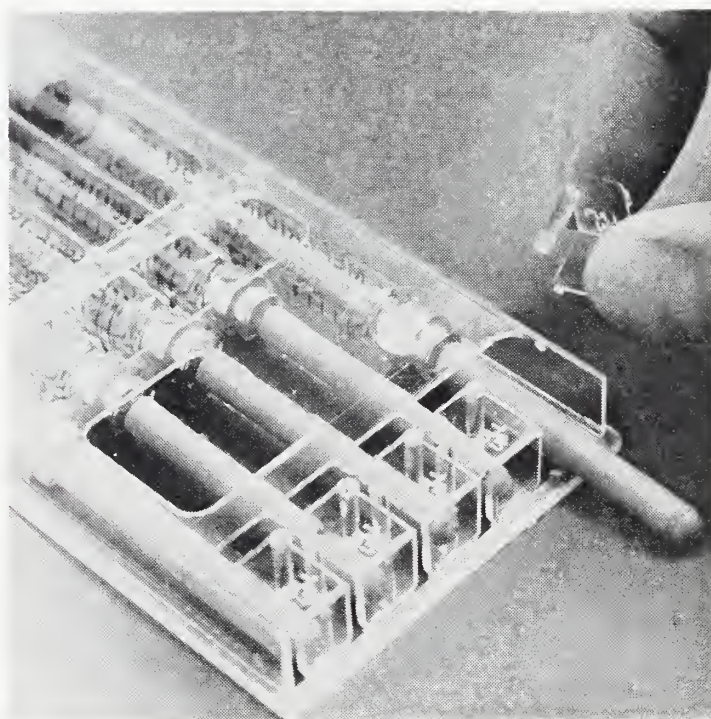
—Hospital personnel can be almost certain no tampering has occurred if the end-lock tab has not been removed.

The TAMP-R-TEL features that discourage tampering also facilitate drug inventory count. There are no increased storage requirements with TAMP-R-TEL, since incorporating the new concept has not changed the dimensions of the TUBEX package.

Wyeth injectable narcotics soon to be available in TUBEX TAMP-R-TEL are codeine phosphate, hydromorphone hydrochloride, MEP-ERGAN®, meperidine hydrochloride, and morphine sulfate.

Barbiturates in TAMP-R-TEL are pentobarbital, sodium, U.S.P.; phenobarbital, sodium, U.S.P.; and secobarbital, sodium.

Pioneer in supplying drugs in unit dose forms, Wyeth supplies a broad line of such medications. Wyeth's unit dose line of injectables includes 33 drugs and 65 dosage variations in TUBEX sterile cartridge-needle units. In addition, Wyeth supplies an extensive selection of oral solids, liquids and suppositories in REDIPAK® single-unit packages for hospitals.

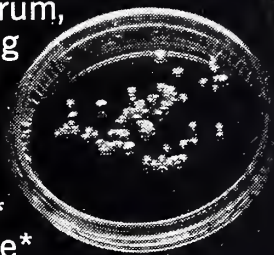


Injectable narcotics and barbiturates in Wyeth's new TUBEX® TAMP-R-TEL® are supplied in a transparent plastic package with each cartridge-needle unit locked into an individual slot within the transparent package by its own end-lock tab.

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Pneumococcus*
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H. influenzae*
M. pneumoniae (PPLO)*
N. gonorrhoeae*



low incidence
of diarrhea

outstanding record
of clinical success

therapeutic blood levels
usually persisting
around-the-clock



Health Leaders Met in Washington

Dr. Roger O. Egeberg, Mrs. Shirley Temple Black, and Dr. Walter C. Bornemeier, were principal speakers for the Third National Voluntary Health Conference in Washington, D. C., May 7.

The two-day meeting at the Statler-Hilton Hotel was sponsored by the Council on Voluntary Health Agencies of the American Medical Association. About 400 attended the conference.

Among the other speakers were the Hon. George Romney, secretary of Housing and Urban Development, Dr. Julius W. Hill, president of the National Medical Association, and Dr. Leroy Burney, newly named executive director of the Milbank Memorial Fund.

Dr. A. Roy Tyrer, Memphis, Tenn., chairman of the sponsoring Council, said this was a national leadership conference to discuss all aspects of voluntarism. The conferees explored the roles, responsibilities, and relationships of governmental agencies, voluntary organizations, and professional associations, in providing health care.

The Conference theme, "Health Team Relationships: Governmental Agencies, Voluntary Organizations, Professional Associations," was de-

veloped during the opening keynote session.

Speakers included Dr. Egeberg, assistant secretary for Health and Scientific Activities of the Dept. of HEW; Mrs. Black, member of the Board of Trustees of the National Multiple Sclerosis Society; Dr. Bornemeier, president-elect of the AMA.

Afternoon sessions featured concurrent discussion groups. Leadoff speaker at Saturday morning's closing session was Dr. Burney discussing the "Role of Foundations in Voluntarism."

Continuing Professional Education Today was discussed by Dr. David A. Wood, past chairman of the Committee on Continuing Professional Education Programs of Voluntary Health Agencies.

Four forum sessions were given:

—Session I, Utilizing Medical Advisory Committees, Dr. Campbell Moses, medical director, American Heart Association;

—Session II, Voluntary Health Agencies and Regional Medical Programs, Dr. Willard A. Wright, consultant to the AMA Committee on Community Health Care;

—Session III, Effective Use of Volunteers and Consumers, Dr. James E. Perkins, managing director, National Tuberculosis and Respiratory Diseases Association.

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56th ACS Clinical Congress to Meet

The world's largest meeting of surgeons, the 56th annual Clinical Congress of the American College of Surgeons, will be held in Chicago Oct. 12-16. Some 14,000 physicians and guests from throughout the world are expected to attend.

Headquarters hotel will be the Conrad Hilton. The program will feature 18 postgraduate courses, more than 260 research-in-progress reports, some 60 panel discussions, operative telecasts from a leading Chicago hospital, and approximately 450 scientific and industrial exhibits.

There will be major addresses by the incoming president of the college and selected guest speakers. Convocation ceremonies for initiates becoming Fellows (members) of the College will be held Oct. 15.

The College's Distinguished Service Award will be presented to an outstanding Fellow of the College and honorary fellowships will be presented Oct. 15.

Fellows of the College whose dues are paid to December, 1969, may register free. Non-Fellows pay \$90.00. Doctors in the federal services pay \$50.00. Initiates, members of the candidate group, and surgical residents register free.

Everyone taking one of the 18 postgraduate courses must pay the fee for the course selected. These courses are accredited by the Council on Medical Education of the American Medical Association.

Official registration forms will be available after June 1. For official forms contact: Mr. T. E. McGiunis, American College of Surgeons, 55 East Erie Street, Chicago, Illinois 60611.

Thoracic Society Holds Annual Meeting

Members and guests of the Mississippi Thoracic Society, medical section of the Mississippi Tuberculosis and Respiratory Disease Association, attended the society's 16th Annual Meeting at the University Medical Center on Thursday, April 16, 1970.

The scientific sessions of this one-day meeting featured two guest lecturers, Dr. Joseph Bates, chief of medicine, V. A. Hospital and associate

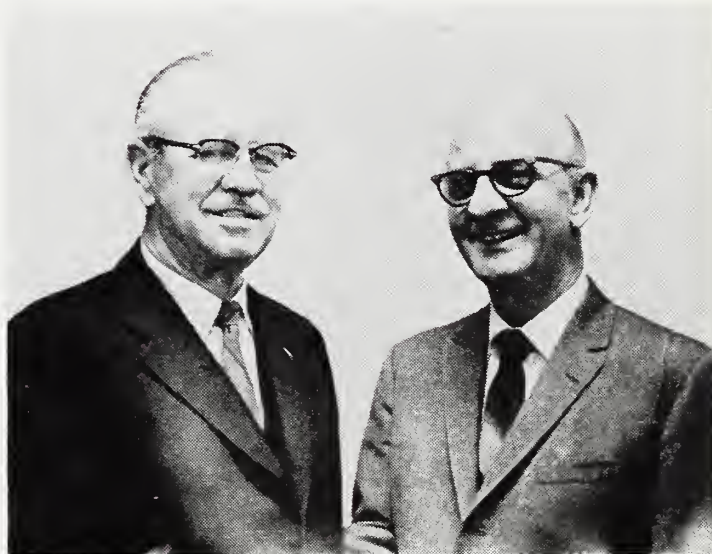
professor of medicine, University of Arkansas, Little Rock; and Dr. John Oschner, chairman of department of surgery, Oschner Foundation Hospital and clinical associate professor, Tulane School of Medicine, New Orleans.

Dr. Bates spoke on "Needle Biopsy for Diffuse and Localized Lesions of the Lungs," "Pneumonia—'Yesterday and Today,'" and "Pulmonary Tularemia." Dr. Oschner discussed "Bronchial Adenomas" and "Thoracic Lesions in the Infant Requiring Urgent Surgical Care."

Other speakers included Dr. James Hardy, UMC, Jackson, speaking on "Current Status of Lung Transplants"; case presentations were presented by MTS members, including Dr. Robert Cole, Amory, Dr. Benton Hilbun, Tupelo, Dr. John R. Williams, Greenville and Dr. Fred Tatum, Hattiesburg.

Dr. Roland Robertson, Jackson and Dr. Antone Tannehill, Tupelo, co-chairmen of the program for this meeting served as moderators for the morning and afternoon sessions. Dr. Wilfred Cole, MTS President, presided at the business session-luncheon scheduled at Primos Northgate Restaurant.

Dr. Frank Butler Named to Committee



Dr. Lawrence W. Long of Jackson, chairman of the MSMA Committee on Publications, welcomes Dr. Frank L. Butler, Jr., of McComb, newly appointed committee member. The six-member committee guides the editorial policy of the JOURNAL and oversees production.

ORGANIZATION / Continued

Drs. Hull, Henderson Elected ACOG Fellows

Dr. Calvin Travis Hull of Jackson and Dr. William H. Henderson of Oxford will be installed as Fellows of the American College of Obstetricians and Gynecologists at its annual meeting, April 12-18, in New York City.

The College, which was founded to promote the health and medical care of women, accepts physicians who specialize in obstetrics and gynecology, who have demonstrated clinical ability by successful completion of an examination, and who have been judged by their colleagues as competent and ethical physicians.

A Fellow must be a graduate of an approved medical school and for at least five years prior to applying for membership in the College, he must have limited his practice to obstetrics and gynecology.

Charges Dropped Against Dr. McCaskill

Circuit Court Judge E. H. Green ordered pending cases against Dr. Luther W. McCaskill of Clarksdale "nolle prosequi" in a wrap-up of the court's activities this term.

Dr. McCaskill was charged with an alleged illegal abortion death and with the performance of two other alleged illegal abortions. These charges have been dropped.

District Attorney Hoke Stone passed the physician's capital charge as nol pros after uncovering evidence which he termed "not good for the state's case" in Jackson recently.

County Attorney George Fleming recommended that trial for the two abortion charges be continued during the summer term of court because "so far a diligent search has not turned up the aborted women."

Harvey Ross, Dr. McCaskill's attorney, contested a continuance of the charges and demanded an immediate trial. Judge Green agreed that every citizen is entitled to a speedy trial and discharged the defendant, according to press reports.

The Mississippi State Board of Health restored Dr. McCaskill's medical license on March 12, 1970, according to Dr. Hugh B. Cottrell, Secretary, Medical Licensure.

Brief Summary of Prescribing Information—9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®
hydroflumethiazide, 50 mg./reserpine,
0.125 mg. protoveratrine A, 0.2 mg.

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When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

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hydroflumethiazide, 50 mg./reserpine,
0.125 mg. protoveratrine A, 0.2 mg.



UMC Commencement Activities Announced

The Honorable James P. Coleman, former governor of Mississippi, will give the graduation address at the 14th Commencement of the University of Mississippi at the Medical Center on Sunday, June 7, at 4:00 p.m. in the Jackson City Auditorium.

Chancellor of the University of Mississippi Dr. Porter L. Fortune will award degrees to candidates from the School of Medicine, the School of Nursing and the Graduate School. This year candidates from the School of Medicine number 75.

Recipients of the Leathers Medal and Faculty Award, highest recognition offered by the medical and nursing schools, will be announced during the ceremony.

Commencement activities will begin with a breakfast for the graduates and their families on Sunday. At 2:00 p.m. Chancellor and Mrs. Fortune will entertain at a reception honoring graduates, their families and friends in the School of Nursing Auditorium.

Dr. Charles Tate Addresses TB-RD Ass'n.

Dr. Charles F. Tate, Jr., associate professor of medicine, University of Miami School of Medicine, was guest speaker at the 58th Annual Meeting of the Mississippi Tuberculosis and Respiratory Disease Association in Jackson at Primos Northgate Convention Center on April 15, 1970.

Dr. Tate presented a paper on "The Hazards of Smoking—Kick the Habit." Dr. Tate is an active volunteer board member of the Dade-Monroe County and the Florida TB-RD Associations and a Counselor-at-Large of the American Thoracic Society.

Representative delegates of the more than 4,000 volunteers, including laymen and physicians, of the Mississippi Tuberculosis and Respiratory Disease Association assembled for this luncheon-business meeting.

The theme of the MTRDA Annual Meeting was "Kick the Habit." An extensive nationwide educational-public information project, sponsored by TB-RD Associations will be conducted in June 1970. The MTRDA and its 87 affiliated volunteer county associations will participate in the "Kick the Habit" educational project.

Dr. Hardy Awarded ACC Fellowship

A Mississippi physician has been granted a Fellowship in the American College of Cardiology (ACC), the national medical society for specialists in cardiovascular diseases. The doctor is among a group of 181 from the United States and Canada recently admitted to the College's highest membership classification.

Dr. Harper K. Hellems, Jackson, ACC Governor for Mississippi, listed the new Fellow as Dr. James D. Hardy, Jackson.

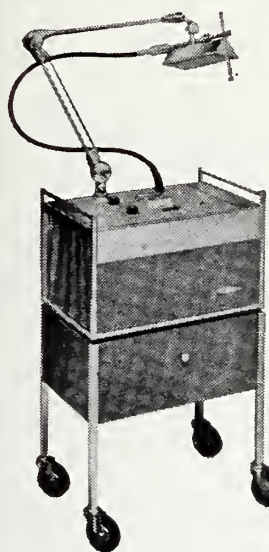
Dr. Hardy, as well as the other new Fellows, has fulfilled stringent membership requirements based on several years of practice and specialty certification. This effort, according to Dr. Hellems, culminates in their being considered by colleagues in their communities as specialists or consultants in cardiovascular diseases.

Governor Signs MSMA Corporation Law



Gov. John Bell Williams signs the state medical association's professional corporation bill into law as President James L. Royals observes. Bill became law in March and makes professional corporations, with all benefits of commercial corporations, available to Mississippi physicians.

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Index to Advertisers

Arch Laboratories	307	Lederle Laboratories	4, 287, 292, 306
Blue Cross, Blue Shield	14	Eli Lilly and Company	front cover, 18
Breon Laboratories	8	Merck, Sharp and Dohme	288, 289, 290
Bristol Laboratories	302, 303	William S. Merrell Company	300
Burroughs-Wellcome	14B	National Drug Company	second cover, 300A, 300B
Campbell Soup Company	272A	Chas. Pfizer & Co., Inc.	296, 297, 298
Conal Pharmaceuticals	280A	Wm. P. Poythress	14C, 272D
Dow Chemical Company	14A	Roche Laboratories	7, 305, fourth cover
Flint Laboratories	10, 11	Julius Schmid, Inc.	16, 17
Geigy Pharmaceuticals	14D, 15	G. D. Searle Co.	272B, 272C
Highland Hospital	299	Stuart Pharmaceuticals, Division of Atlas Chemical Industries, Inc.	280B
Hill Crest Hospital	6	Wyeth Laboratories	293, 294
Hoechst Pharmaceuticals	12	Thomas Yates and Company	third cover
Hynson, Westcott & Dunning	3		
Kay Surgical	307		

IN CONCLUSION

102nd Annual Session, a little more than a week away, opens May 11 at Biloxi with something for everybody. Outstanding essayists are on program, biggest scientific exhibit yet will be presented, a dozen specialty societies will meet, and four medical alumni social occasions are in offing. University of Tennessee, late getting arrangements finalized, plans gala Tuesday evening, May 12. Ole Miss is on Monday, while Tulane and Vanderbilt have Tuesday evening parties.

Shortage of nursing home beds in Mississippi is easing up, according to State Board of Health which licenses institutions. Generally accepted formula is 40 beds per 1,000 persons over-65, meaning state should have 8,550 beds. Present total is 6,000 beds and is rapidly expanding with new construction on existing homes, projects nearing completion, and plans on drawing boards. Forecast is for 8,500 beds in a year. State licenses 112 institutions at present.

Household detergents are getting eye from pollution-conscious source with allegation that they are drug-like products marketed before sufficient testing. Charge is that some detergent products contain phosphates with arsenic as a constant impurity, as much as 25 ppm. Arsenic in waste water from washing machines has been found to range 5 to 100 ppb, and recent tests showed water in Kansas River tested 2 to 8 ppb of arsenic.

Alabama M.D.'s are gnashing teeth over backlog of 120,000 unpaid Medicare claims. State medical society reports that similar backlog of 38,000 pending Medicaid claims are being processed. Reports are that Alabama Blue plan, which is fiscal administrator for both programs, bogged down in computer processing. Mississippi Medicaid program, just four months old, has also had data processing problems but is said to be catching up and moving toward current payment basis.

National Institute of Mental Health will soon offer formal training programs in prevention of suicide, now the 10th leading cause of death in U.S. A full year interdisciplinary fellowship in suicidology begins in September and carries stipends up to \$12,000. Ten weeks instruction program requires no doctoral degree and has stipends up to \$2,400. Two-week summer institute in suicidology will also be conducted for prevention center workers, police, clergy, and others.



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CONTENTS

ORIGINAL PAPERS

- Pacemaker Management of
Heart Block **309** JOHN W. BOWLIN, M.D.
- Artificial Kidneys in Acute
Renal Failure **317** JOHN D. BOWER, M.D.
- Potassium Therapy and
Gastrointestinal Lesions **321** DAVID N. EMERSON, PH.D.

SPECIAL ARTICLES

- Recent Advances in
Newborn Care **327** ALFRED W. BRANN, JR.,
M.D.
- Radiologic Seminar
XCVI: Reversible
Vascular Occlusion of the
Colon **331** C. D. BOUCHILLON, M.D.

EDITORIALS

- Abortion and the Law:
Anachronisms Racing
Science **335** It's Up to the Court
- The CBS Eye:
Color It Yellow **336** Video Jaundice
- Goods and Services
Simply Cost More **337** Curve Goes up, Up, UP!

THIS MONTH

- The President Speaking **334** 'Changes and Challenge'
- Medical Organization **343** The 102nd Annual Session

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HEW, AFL-CIO Are Against Chiropractic

Medicine and other branches of the scientific community have insisted for the past 75 years that chiropractic is an unscientific cult, whose practitioners are not qualified to diagnose and treat human disease.

Chiropractic, in turn, has claimed that medicine's opposition is for selfish reasons only. "The citizen has the obligation to take a firm stand against the monopolistic goals of the American Medical Association," states a booklet distributed by the American Chiropractic Association.

Until the past year, the medical profession virtually alone assumed the responsibility of informing the public about the invalidity of the chiropractic hypothesis (that human disease is caused by a spinal subluxation and cured by a spinal adjustment). Chiropractic shortcomings in education and practice were set forth.

Medicine's position is that all methods of disease prevention, health maintenance and care should be submitted to careful scrutiny and objective evaluation—the scientific process. Despite being 75 years old, chiropractic has failed to produce any scientific proof for its theories, while claiming competence to treat the broad gamut of

human disease. Thus medicine opposes chiropractic for the same reason it opposes other forms of health quackery: to try to prohibit poorly-trained individuals from performing functions for which they are totally unqualified.

Significant developments from outside medicine have occurred in regard to chiropractic during the past year.

The U. S. Department of Health, Education and Welfare submitted findings of an independent, unbiased study of chiropractic ordered by Congress. In a report to Congress in January 1969 by Wilbur J. Cohen, then secretary of HEW, it was recommended that chiropractic service not be covered in the medicare program.

The report, considered to be the most penetrating analysis of chiropractic ever made, concluded: "Chiropractic theory and practice are not based upon the body of basic knowledge related to health, disease, and health care that has been widely accepted by the scientific community. Moreover, irrespective of its theory, the scope and quality of chiropractic education do not prepare the practitioner to make an adequate diagnosis and provide appropriate treatment."

HEW told Congress that its study, after evidence had been presented by chiropractic's foremost spokesmen, educators and practitioners, showed, among other things, that:

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1. There is a body of basic scientific knowledge related to health, disease, and health care. Chiropractic practitioners ignore or take exception to much of this knowledge despite the fact that they have not undertaken adequate scientific research.

2. There is no valid evidence that subluxation, if it exists, is a significant factor in disease processes. Therefore, the broad application to health care of a diagnostic procedure such as spinal analysis and a treatment procedure such as spinal adjustment is not justified.

3. The inadequacies of chiropractic education, coupled with a theory that de-emphasizes proven causative factors in disease processes, proven methods of treatment, and differential diagnosis, make it unlikely that a chiropractor can make an adequate diagnosis and know the appropriate treatment, and subsequently provide the indicated treatment or refer the patient. Lack of these capabilities in independent practitioners is undesirable because appropriate treatment could be delayed or prevented entirely; appropriate treatment might be interrupted or stopped completely; the treatment offered could be contraindicated; all treatments have some risk involved with their administration, and inappropriate treatment exposes the patient to this risk unnecessarily."

Other organizations outside medicine have spoken publicly with resolutions or statements in opposition to chiropractic. Some statements have come from organizations such as the AFL-CIO and National Council of Senior Citizens, which in the past have not been on the same side of the fence as the American Medical Association in regard to federal health care matters.

Where it became a matter of providing quality health care to the elderly, as required by the medicare law, the organizations opposed chiropractic inclusion. As the National Council of Senior Citizens emphasized, "With chiropractic and other completely unscientific cults, there is no possibility for quality health care."

The AFL-CIO Executive Council recently issued a statement that said, in part:

"Of equal importance to holding down costs is the maintenance of quality care in the medicare program. Of immediate concern is the threat to quality care represented by the drive to include less than fully qualified medical practitioners such as chiropractors in the medicare program. At stake is the direct access to the billions of dollars for health care being provided the elderly by the medicare program. Medicare

should not become a vehicle for exploitation of the health needs of the elderly. The AFL-CIO opposes any change in the medicare law which would open up the program to unqualified practitioners."

The National Council of Senior Citizens, an organization composed of 2½ million persons 65 years of age or older (the medicare recipients themselves), stated its views in its official newspaper, the *Senior Citizens News*, in January 1969. The article entitled "Why Chiropractic Cult Cannot Provide Quality Health Care!" included the conclusion:

"Chiropractic treatment, designed to eliminate causes that do not exist while denying the existence of the real causes, is at best worthless—and at worst mortally dangerous."

The American Public Health Association, composed of administrators of the nation's public health programs, spoke out at its annual meeting in November 1969. The APHA's governing council endorsed the HEW report and urged continued exclusion of chiropractic from medicare.

In addition, the APHA urged "that States re-evaluate their existing licensure programs for chiropractors and naturopaths to determine whether such licenses should be further restricted or abolished, and that existing licensure programs be more rigorously policed." The APHA resolution also recommended "that professional and consumer groups undertake appropriate consumer education on the hazards of unscientific health care, including chiropractic or naturopathy."

Continued exclusion of chiropractic under medicare was supported also by a blue ribbon task force appointed by HEW Secretary Robert H. Finch to study the problems of medicaid and related programs. Under medicaid (Title XIX of the Social Security Act) programs are state-administered with financial assistance from federal funds. Some states have authorized payment for chiropractic services under medicaid. The HEW task force reported in November 1969. It concluded that payment for chiropractic and naturopathic services "is not an effective use of federal medicaid funds."

The task force report urged, "A legislative amendment should be enacted denying federal financial participation in medicaid payments to chiropractors and naturopaths."

One of the principal drives by chiropractic in state legislatures in recent years is for passage of so-called insurance equality laws that would make inclusion of payment for chiropractic services mandatory in all health insurance policies.



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NEWSLETTER

June 1970

er Doctor:

Congress is putting the dollar crunch on Medicare and Medicaid with amendments which breezed through the House of Representatives. Medicare beneficiaries may now choose to be under closed panel plans which would receive on capitation basis up to 95 per cent of what would be paid under fee-for-service. Law would also place ceiling on M.D. fees at 75th percentile of 1969 levels.

New bill would repeal controversial Medicaid escalation clause requiring comprehensive programs for all by 1977. Usual election year lagniappe of 5 per cent Social Security payment increase - with bigger taxes - was passed. Chiropractic was again excluded from Medicare.

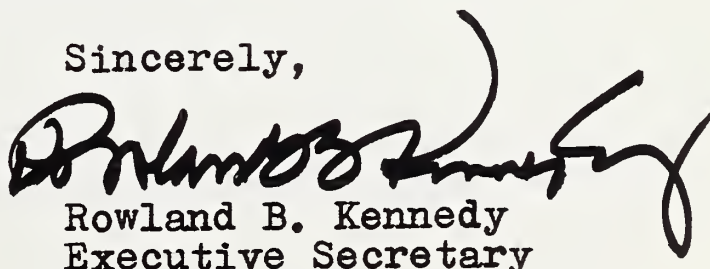
June 21-25 Chicago annual convention will be a corker with hot politics, emotion-charged issues, and biggest money problems yet. Delegates will be asked to raise AMA dues to \$150 per year for new leadership programs, back income taxes due on JAMA, needed reserves, cost-of-inflation upsurges. Himler Report will dominate debate, liberalization of abortion policy to patient-physician decision stir most discussion.

Medical students in Jackson gave President Nixon's Cambodia campaign overwhelming support, as shown in recent opinion poll. Student body voted 69 per cent to support cleaning out Viet Cong sanctuaries across border, while 28 per cent opposed and 3 per cent had no opinion. Mass news media have largely portrayed medical students as being in forefront of peace-now, get-out moves.

Most pessimistic prediction yet on hospital costs comes from former health chief and president of the American Hospital Association. Addressing recent San Francisco meeting, Dr. Philip R. Lee and Mark Drake said that by 1980, hospital costs in some parts of U.S. could reach \$1,000 per day. Inference is that levels of a third to a half that figure may be commonplace.

American Cancer Society was embarrassed when its prize TV antismoking celebrity, Tony Curtis, was convicted for marijuana possession. Curtis, who received heavy TV exposure in ACS antitobacco commercials, apparently has different feelings about pot than on fags. Blow to society comes on heels of public rift with Tobacco Institute over validity of smoking-dog lung cancer research.

Sincerely,



Rowland B. Kennedy
Executive Secretary

Rocky Mt. Cancer Conference to Meet

The historic Brown Palace Hotel in Denver will be the site of the 24th Annual Rocky Mountain Cancer Conference. The Conference, to take place on July 17 and 18, 1970, is expected to attract over 400 physicians from all over the country. It has earned the reputation of being one of the finest medical meetings of its kind in the country.

This year the guest faculty will discuss G.I. tract tumors and soft tissue cancers. President-elect of the American Medical Association, Dr. Walter C. Bornemeier, Chicago, will be the luncheon speaker on Saturday. Luncheon speaker on Friday will be Dr. Jonathan E. Rhoads, chairman of the department of surgery at the University of Pennsylvania and president of the American Cancer Society.

These distinguished gentlemen will be joined

by an equally distinguished faculty. Each physician will present a paper and in addition will take part in panel sessions. Scientific presentations will include "Malignant Melanomas," "Results of Radiation Therapy Augmented by 5-Fluorouracil or Oxygen in the Treatment of Gastrointestinal Malignancies," "Host Defense Mechanisms in Malignant Melanoma," "What Is Being Done About Colon Cancer?," and "Management of Soft Tissue Sarcomas."

Local Colorado physicians, with national reputations, will moderate the panel sessions. They include: Drs. Alexis E. Lubchenco, Frank B. McGlone, and Mason Morfit, all of Denver.

Conferees will stay at the Brown Palace Hotel and many will extend their stay in Colorado to visit the scenic, cool vacationland. The combination of a thought-provoking scientific meeting and a trip to the mountains will attract many physicians and their wives. Details can be obtained by writing to the Rocky Mountain Cancer Conference, 1764 Gilpin Street, Denver, Colo. 82018.

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DATELINE

100 Americans
Seek M.D. Abroad

New York - More than 3,000 American students are in foreign medical schools, but the easy solution of going abroad for M.D. training will be tougher. Biggest group of Americans in foreign schools are in Italy where 1,000 are enrolled, and Mexico is next with 600. Schools in Switzerland, where most foreign trained Americans have attended, are closing doors to U.S. applicants in favor of helping poor, not rich, nations. Restrictions are also seen in Netherlands and Spain.

UMC Opens Blood
Procurement Office

Jackson - The University of Mississippi School of Medicine is enjoying success in finding new supplies of human blood with its Blood Procurement Office. When facility was first opened, blood replacement ran out 55 per cent. Recently, replacement was 100 per cent for a full month. Effort is reducing costs, too, because UMC now purchases only 100 to 200 units per month against former 600. Numerous open heart surgical procedures at UMC intensify blood needs.

Radiologists Get
Equal Fee Assurance

Chicago - While the vast majority of American physicians fret and fume over Medicare fees, the American College of Radiology has come up with the nearest thing to true usual and customary fees in agreement with Social Security Administration. Radiologists who bill non-Medicare patients for a period of a year may have these fees recognized as usual, customary, and reasonable for Medicare. The agreement was formalized in SSA instructions to carriers.

Intern, Resident
Moonlighting Hit

Boston - The authoritative New England Journal of Medicine has raised serious questions about interns and residents moonlighting, such as weekend emergency coverage, insurance examinations, and making house calls. Journal says that inexperience could lead to difficult medicolegal situations, that work can interfere with the training program, and that lack of rest and relaxation may make a dull intern or resident.

AAP Opens Capitol
Hill Office

Washington - The American Academy of Pediatrics has joined the growing number of specialty societies to open Washington offices. Plans call for July 1 opening of AAP Capitol Hill office "to identify the AAP as the primary professional health organization concerned with matters of child health." Previously, the College of American Pathologists and American College of Radiology have opened Washington offices.

Blood Donor Month Increased Supply

Celebration of January for the first time as National Blood Donor Month increased the post-holiday blood supply importantly at the time of greatest seasonal need, the American Association of Blood Banks has reported to President Nixon who proclaimed the month.

"The almost nationwide shortages of 1969 and 1968 at this time were not repeated," said Dr. Enold H. Dahlquist, Jr., of Providence, R. I., association president. "There were very few reports of surgery being delayed for lack of blood. Such reports were numerous last year.

"Many blood banks reported an increase in donors in January 1970, over January 1969, some as high as 25 per cent. A large number of people gave for the first time. This is especially encouraging. When a person gives once, he discovers his fears to be groundless and he is happy to become a regular donor. Blood is needed every day of the year.

"Where local shortages became critical in Jan-

uary, donors responded to emergency press and radio-television appeals. All concerned are grateful to the news media for this cooperation as well as to Congress and President Nixon for establishing January as National Blood Donor Month."

President Nixon on Dec. 31 proclaimed this "to pay special tribute to the voluntary blood donor and to encourage increasing numbers of people to be voluntary blood donors" saying no gift is "more priceless in time of personal crisis, than the donation of one's blood" and "the voluntary blood donor truly gives life itself."

"Mobilized through the American Red Cross and the American Association of Blood Banks, and encouraged by modern medical techniques," said President Nixon "... the ranks of the voluntary blood donor have continued to grow and to make unparalleled contributions to the health of our people."

Saying it was in response to the President's proclamation, the Dads Club of St. Thomas Aquinas School in Dallas donated 24 pints to the Wadley Blood Bank. This had 500 more January donors than in 1969, an increase of 20 per cent. Increases also were reported at Beaumont and Austin, Tex., and Ardmore, Okla.

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Warning: Not intended for treatment of pernicious anemia or other primary or secondary anemias. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with pernicious anemia who receive more than 0.1 mg of folic acid per day and who are inadequately treated with vitamin B₁₂.

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3-D X-Ray Film System Developed

Photosystems Corporation, a Long Island company specializing in advanced photo-optical engineering, has announced that it has completed the development of a system for producing three-dimensional x-ray films. The equipment has been delivered to Albert Einstein College of Medicine, Bronx, New York for clinical evaluation.

Richard A. Hayes, president of Photosystems Corporation, indicated that the new x-ray system is the result of a three-year research and development effort by a team of company scientists and engineers, with medical direction by Dr. Reuben Hoppenstein, a neurosurgeon. Before being released for medical evaluation, said Hayes, the equipment was subjected to exhaustive engineering tests over a period of six months.

The new apparatus, known as the "Tridex" Three-Dimensional Time Sequence Radiograph, is used in conjunction with standard hospital x-ray equipment, and produces a three-dimensional radiogram on a single sheet of conventional medical x-ray film. The system includes an illuminated viewer for displaying the three-dimensional x-ray, which is viewed with the unaided eye. There is no requirement for special eyeglasses.

The new Photosystems equipment will also produce a time sequence of several consecutive x-rays on a single sheet of film, and display them in animated form. The animation can be speeded up, slowed down, or stopped at any point, by adjusting the viewer controls.

The company indicated that its three-dimensional x-ray system is designed to operate at approximately the same levels of patient radiation as used in conventional radiological techniques of the type requiring multiple exposure. In some of these procedures, it is anticipated that the new system will require a lesser number of individual exposures, and thereby permit a decrease in total radiation.

Clinical evaluation at Albert Einstein College of Medicine will be under the director of Dr. Mannie M. Schechter, professor of radiology.

Brief Summary of Prescribing Information—9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or bronchial asthma and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

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ORIGINAL PAPERS

Pacemaker Management Of Heart Block

JOHN W. BOWLIN, M.D.
Tupelo, Mississippi

WITHIN THE LAST DECADE the advent and refinement of electrical cardiac pacing has greatly improved the prognosis in patients suffering from chronic heart block and Stokes-Adams attacks. This report discusses the temporary and permanent applications of pacemaker systems in heart block and cardiac arrhythmias and summarizes experience with cardiac pacemaker implantations at the North Mississippi Medical Center during the last two years.

Gould,¹ in 1929, first successfully restored a heart beat with electricity by inserting an electrode needle percutaneously into the myocardium. Zoll,² in 1952, successfully resuscitated a heart in ventricular standstill by use of an external pacemaker. These early methods of shocking, defibrillating, and pacing the heart were mainly applied to patients undergoing cardiac surgery which was then, too, in its infancy.

Later, when Weirich, Lillehei and associates³ reported in 1957 the use of myocardial electrodes connected to an external pacemaker, the potential application of similar systems to patients with chronic heart blocks and Stokes-Adams attacks was realized. This type of external pacing

system was utilized in some patients with significant advancement; however, infection arising

Mortality and morbidity of heart block and Stokes-Adams attacks has been greatly altered during the past decade with the development of reliable permanent pacing systems. Use of the different pacemaker systems is reviewed and experience with cardiac pacemaker implantations at North Mississippi Medical Center during the last two years is reported.

from externally placed electrodes resulted in frequent failure. This problem was solved in 1961 when Chardack⁴ reported his use of a totally self-contained permanent pacemaker system, with placement of myocardial electrodes at thoracotomy connected to a subcutaneously placed pulse generator. This continuing progress, combining the achievements of cardiology, surgery, electronics and biophysics, has supplied physicians with more durable pacemaker systems and a variety of techniques for electrical control of cardiac rate.

Read before the 101st Annual Session, Mississippi State Medical Association, Biloxi, May 14, 1969.

In the normally functioning heart, the sinoatrial node assumes the role of the primary cardiac pacemaker. From this site of specialized muscle tissue located in the sulcus between the superior vena cava and the right atrium, excitatory impulses of depolarization travel through a rather constant atrial pathway to arrive at the atrioventricular node located in the inferior atrial septum. With its slower rhythmicity, the A-V node further alters and delays excitation before the wave of depolarization travels via ventricular pathways through the bundle of His and through left and right bundles to terminate in the neuromuscular Purkinje network. Here it initiates myocardial contraction in the apex which progresses as a wave-like motion toward the ventricular outflow tracks for optimum ventricular emptying and cardiac efficiency. By far the most common site of interruption of the conduction system in patients suffering from chronic heart block is in the atrioventricular bundle, whether it be recurrent block or long-standing chronic block.

The cause of heart block associated with septum primum defects or block following surgical closure of high ventricular septal defects is well understood. However, the causal factors in most instances of acquired heart block are little

understood. We commonly associate arteriosclerotic and hypertensive heart disease with heart block and atrioventricular dissociation; however, the common denominators of these diseases such as cardiac enlargement, angina pectoris, severe systemic hypertension and myocardial infarction are not commonly encountered in patients with acquired permanent heart block. Prolonged mechanical stress with tissue injury and fibrosis of the conduction system is thought by some observers to be a more likely etiologic factor in patients suffering from acquired heart block.⁵ Uremia, electrolyte imbalance, myocarditis, endocarditis, or drug toxicity (digitalis or quinidine) may cause acquired heart block by primary involvement of the conduction system or through myocardial cellular changes.

CARDIAC ASYSTOLE

Robert Adams⁶ and William Stokes⁷ first described the symptoms of vertigo, convulsions, and syncope due to profound bradycardia or cardiac asystole. In patients with permanent block, syncope attacks commonly occur during periods of increased activity or with further arrhythmias, but may occur when the patient is at complete rest. However, we often associate Stokes-Adams attacks as described with heart block as occurring



Figure 1. Transthoracic epicardial technique of implantation was the first method of permanent cardiac pacing generally accepted. An area near the apex, free of coronary vessels, is selected for direct suture of the electrode terminals into the myocardium.



Figure 2. This patient's initially implanted epicardial system failed and electrode breakage was detected on chest x-ray. A permanent endocardial system was implanted. An improved technique of electrode application to the epicardium is now being used which should lessen the chance of electrode breakage.

with the sudden development of block and ventricular escape. In patients having heart block there is approximately an equal division of cases exhibiting Stokes-Adams attacks or other symptoms and signs of inadequate tissue perfusion and congestive heart failure. Patients with chronic heart block have systemic hypertension because of an increase in stroke volume output at the slow heart rate. Inadequate tissue perfusion can be documented by an increase in the arteriovenous oxygen difference and is seen clinically as cerebral, hepatic, and renal insufficiency. Thus, it is evident that the physician must suspect heart block in a variety of presenting symptoms.

Acquired heart block which goes untreated is a constant threat to the life of the patient. The effects of heart block are completely unpredictable. Patients may go several years with a chronically slow heart rate without any significant problem, and yet to these patients there is a constant threat of syncopal attacks or fatal arrhythmias. The average duration of life after detection of heart block is only slightly over two years.⁸ In patients having experienced Stokes-Adams attacks, the mortality increases to 50 per cent within the first year.⁹

ISUPREL THERAPY

A long list of sympathomimetic drugs and other agents have been used in an attempt to increase the idioventricular rate of heart block. Prior to the development of pacemaker systems, isoproterenol (Isuprel) was the main mode of therapy for the entire gamut of heart block patients. Intravenous Isuprel (two mg. per 1,000 cc. of physiologic solution) infusion, maintaining a ventricular rate of 45-50 beats per minute, is now occasionally needed in the treatment of the acute Stokes-Adams attack until the patient can be transported to a center where pacemaker systems are available. Drug therapy may be lifesaving in the treatment of the acute syncopal attack but should not be recommended in the long-term treatment of the patient with chronic heart block. Dack¹⁰ and Friedberg,¹¹ employing long-term drug treatment for heart block, experienced mortality rates close to that observed in patients receiving no treatment.

The four commercially available pacemaker systems in wide use are the Cordis, Electrodyne, General Electric, and Medtronic. It is estimated that approximately 10,000 pacemaker units are presently in use. The energy source, generally termed the pulse generator, is supplied by mercury batteries which have a theoretical shelf life of five years. Experience indicates that replacement

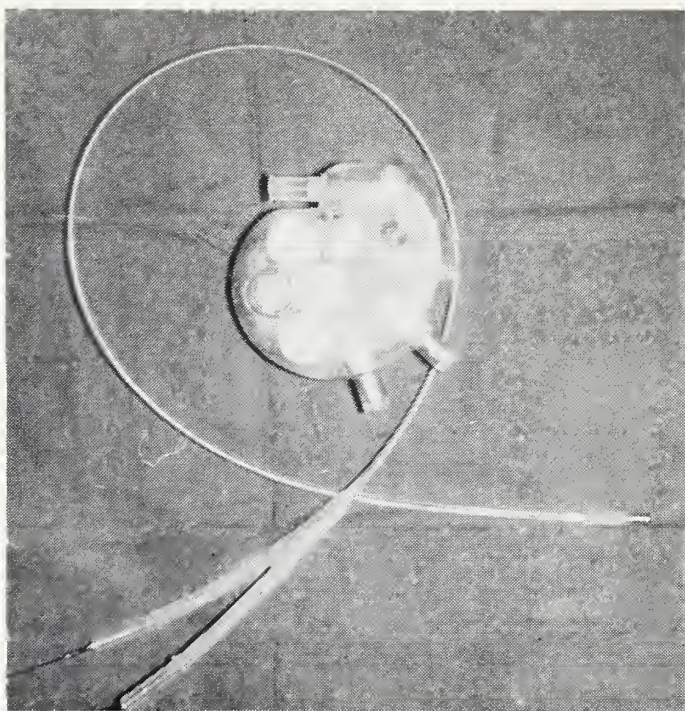


Figure 3. The Medtronic asynchronous permanent pulse generator and permanent endocardial bipolar electrode catheter.

of the pulse generator is needed after two and a half to three years.

Basically there are three types of pacemaker pulse generators. The asynchronous unit, which emits electrical impulses at a fixed rate independent of the intrinsic cardiac electrical potentials, is the oldest type unit in use and has proven satisfactory in most cases, especially in the older and less active patient. The second type of pulse generator is the synchronous unit, which is designed to correlate the ventricular contraction with the atrial contraction and thus simulate normal sinus rhythm. This type of pacemaker unit requires an additional atrial electrode and is a more complicated system than the asynchronous generator. It is reserved for patients with greater physical activity or for patients who are in critical need of maximum cardiac output. The third type of pulse generator is the demand unit which is programmed from the R-wave and is designed so that its own stimulation is suppressed when the patient's heart rate is faster than the pre-set rate of the pulse generator.

THE DEMAND UNIT

This system presently is having an increase in popularity. It eliminates the potential hazard (ventricular fibrillation) of the pacemaker firing during the vulnerable period of ventricular repolarization. It also avoids repetition and competition between the pulse generator and idioventricular contractions. Nathan et al¹² observed that after implantation of permanent pacemakers

for A-V block approximately one-fourth of the patients reverted to sinus rhythm or second degree block. These patients have competitive foci of stimulation when paced with an asynchronous system and may be symptomatic (palpitation and dyspnea). Thus, demand systems are gaining preference in patients with pre-operatively high idioventricular rates and in patients who experience periodic syncopal attacks with atrioventricular dissociation and otherwise maintain a sinus rhythm the majority of the time.

There are two operative approaches to the patient requiring permanent cardiac pacing and the difference is basically in the type of electrode system applied. The initial permanent pacemaker which achieved general acceptance was the epicardial type of electrode application introduced by Chardack,⁴ Zoll,¹³ and Kantrowitz.¹⁴ A left anterior thoracotomy incision is the approach and the electrode terminals are sutured to the surface of the left ventricle (Figure 1). In general, this unit has been quite successful and was the only method of permanent pacing available until 1964. Breakage of the electrode wire and premature failure of the pulse generator were the common causes of failure of the early epicardial units. Improved electrode terminals with elimination of constant stress at the point of penetration of the myocardium has eliminated to a great degree the wire breakage factor.

CLINICAL EXAMPLE

We have had experience with a patient who three years prior to admission to North Mississippi Medical Center had implantation of a permanent epicardial unit (Figure 2) and had two pulse generator replacements, followed by another syncopal attack. On chest x-ray breakage of an electrode terminal was noted. The patient would experience syncopal attacks when in the upright position, but would pace satisfactorily in the recumbent position when the ends of the broken electrode were in contact. The x-ray shows that a permanent type of transvenous pacing system was used to replace his former unit. The primary disadvantage of the epicardial method of application is the need for thoracotomy with general anesthesia. This method of implantation is presently being used only in younger, more active patients who may also be candidates for the more complicated synchronous type pacemaker.

The second method of electrode application, employing a permanent transvenous endocardial catheter (Figure 3), was introduced in 1965 by

Chardack¹⁵ and is a simplified method when compared with the epicardial type unit in that this application does not require a general anesthetic or a thoracotomy (Figure 4), but is implanted by means of transvenous passage of a permanent electrode catheter through a cervical vein into the right ventricle where the electrode terminal is wedged in the trabecular musculature of the cardiac apex under fluoroscopic control (Figure 5). The complete procedure is performed under local anesthesia. The generator is placed in a subcutaneous or subpectoral pocket and the electrode catheter is connected by way of a tunnel between the cervical and pectoral wounds (Figure 3). Anticoagulation is unnecessary.

ENDOCARDIAL SYSTEM

Danielson,¹⁶ et al, found the endocardial pacing system of particular value in patients exhibiting failure of previously implanted epicardial units. Not only could the procedure be done under local anesthesia but the previously implanted epicardial electrodes could be left in place undisturbed, with only the old pulse generator removed. They reported eight patients underwent replacement by endocardial electrode system; seven of eight failures were due to wire breakage.

Long-term electrical pacing of the heart has unequivocally become the treatment of choice in symptomatic heart block, whether the symptoms be syncopal attacks or symptoms of cardiac decompensation. One Stokes-Adams attack is indication enough for implantation of a permanent pacing system. Decreased exercise tolerance, renal or cerebral impairment and perhaps angina are additional symptomatic indications for permanent pacing. Not infrequently both the patient and physician will notice a great improvement in general strength and mental alertness of a post-operative patient who pre-operatively was considered asymptomatic except for Stokes-Adams attacks. We have experienced this change frequently.

TRANSVENOUS SYSTEM

With development of the transvenous endocardial electrode system, age is no longer a contraindication to pacemaker implantation. With improvements in materials and methods of application, asymptomatic patients with idioventricular rates less than 40 or whose EKG's show patterns of ventricular irritability¹⁷ are now recommended for permanent pacing. The non-operative management of these patients is considered more hazardous and radical than management by permanent pacing systems. Congenital heart

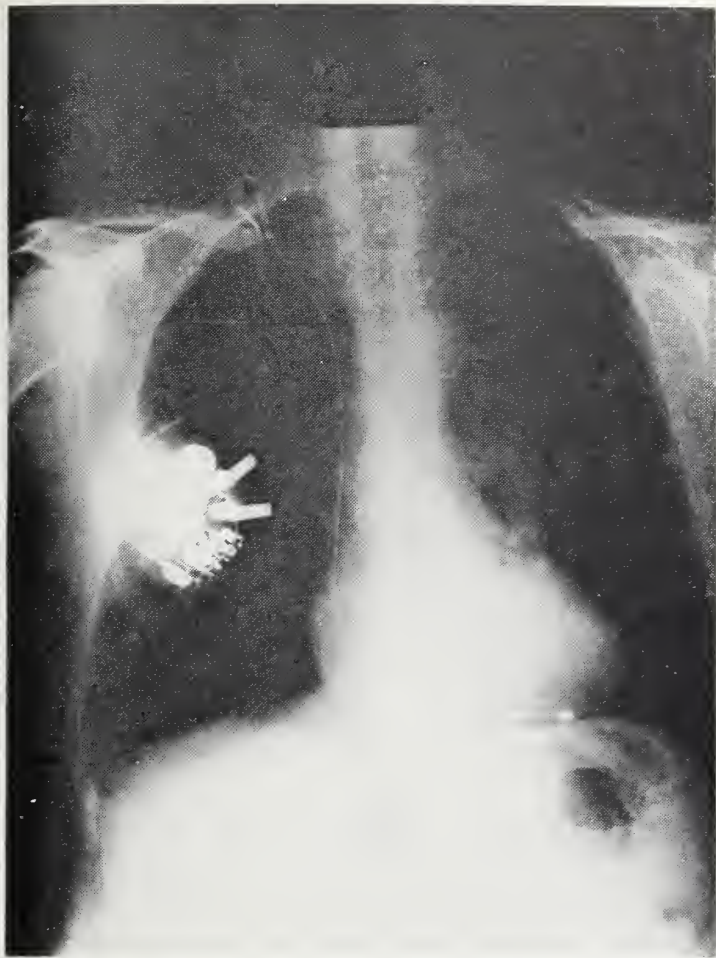


Figure 4. Permanent endocardial pacemaker showing catheter electrode terminals in the apex of the right ventricle. The pulse generator is located in the subcutaneous pocket of the right pectoral area.

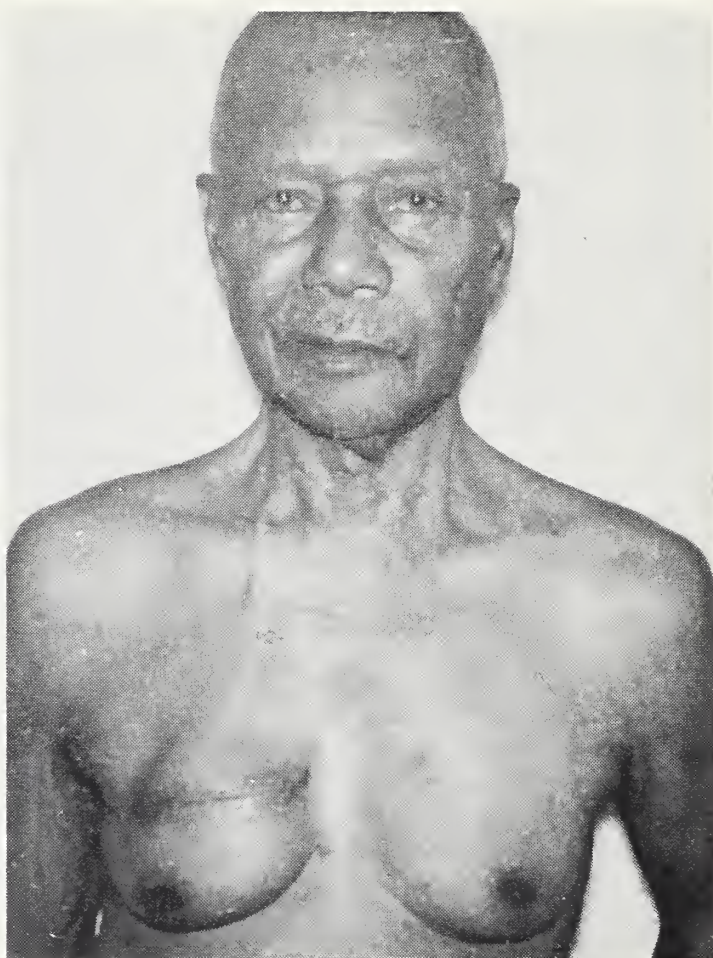


Figure 5. Photograph of our first patient: pacemaker implanted February, 1967. This photograph was made recently, following replacement of the pulse generator for impending battery failure. Note the cervical and pectoral incision scars.

blocks producing symptoms or demonstrating widened QRS complexes on EKG's should have implantation of a permanent pacemaking system. Sinus bradycardia or sinus arrest, if symptomatic, should be treated by implantation of permanent pacemakers.

Post-operative tachyarrhythmias and second or third degree block with acute myocardial infarctions may require use of a temporary pacing catheter. Heart block, when present, usually develops within 36 hours after occurrence of a myocardial infarction. The incidence of block is highest with inferior infarctions but associated with the highest mortality in anterior infarctions. Of patients recovering from infarction only 5 to 8 per cent will persist to have permanent block. Use of a temporary pacing catheter improves the cardiac output by increasing the cardiac rate. Artificial pacing removes the threat of Stokes-Adams attacks, which carry a higher mortality in patients with myocardial infarctions. Probably most significant, use of the temporary pacing catheter eliminates the need for Isuprel and other drugs producing cardiac irritability but allows the use of digitalis and suppressant drugs without com-

pounding A-V conduction problems. In our experience with the use of a temporary pacing catheter in heart block, secondary to myocardial infarctions, uremia and electrolyte imbalance, four of six patients survived.

To insure complete and optimal care for the patient with heart block we have found it beneficial to divide management of the patient into four phases, beginning with admission to the hospital and extending into the post-hospitalization period.

(1) The period of intensive observation: On admission to the hospital all patients having complete heart block or suspected of having had complete heart block or Stokes-Adams attacks are placed in the Intensive Care Unit where they are continuously monitored by electrocardiographic equipment with a defibrillator and external pacemaker at the bedside at all times. Routine laboratory studies including electrocardiogram, chest x-ray, and serum chemistry profiles are performed. Studies obtained during the initial few hours of hospitalization exclude acute myocardial infarction, uremia, and electrolyte imbal-

ance as causal factors in the heart block. A solution of isoproterenol (Isuprel—2 mg. per 1,000 cc. of physiologic solution) is placed in the immediate area of the patient for use in case of Stokes-Adams attack. We do not recommend the routine use of a constant infusion of Isuprel in the patient with chronic heart block during this initial period, especially when there is evidence of ventricular irritability.

TEMPORARY CATHETER

(2) Passage of a temporary transvenous pacing catheter: We advise passage of a temporary pacing catheter in patients with chronic heart block and particularly in those having experienced Stokes-Adams attacks as soon after admission as feasible, preferably the day of admission. The introduction of this pacing system removes the always constant threat of Stokes-Adams attacks. This early phase of hospitalization when various medications are administered is a precarious period in patients with chronic heart block. Temporary pacing not only allows for early improvement and stabilization of the patient's condition but also eliminates the need for Isuprel infusion. Cardiac output is improved and congestive heart failure clears. The temporary pacing catheter is passed through the basilic vein into the apex of the right ventricle and with the use of an external pacer both amperage and rate alterations are available. In patients in whom operative procedures for some other condition is anticipated, the temporary pacing is maintained throughout the surgery to be followed by implantation of a permanent pacing system. Use of the temporary pacing system removes the necessity for urgent implantation of a permanent system and yet improves and stabilizes the condition of the patient.

(3) Implantation of the permanent pacing system: We now feel that with the possible exception of the young, active patient, in whom a synchronous unit is perhaps indicated, candidates for permanent pacing should have implantation of endocardial transvenous pacing systems. This system has a smaller morbidity and mortality rate immediately post-operatively and long-term results are just as good as those seen with epicardial units. Implantation of the permanent endocardial system is scheduled several days in advance. During the period of preparation the heart is paced by the temporary catheter. It is essential that the surgeon be thoroughly familiar with all monitoring equipment and the entire gamut

of pacing equipment. During the operative procedure patients are monitored continuously by electrocardiogram with external defibrillators and pacing equipment available. The procedure is performed under local anesthesia with the anesthesiologist monitoring vital signs. The external jugular vein on the right side is exposed and if of adequate diameter, is used for passage of the electrode catheter into the right ventricle using fluoroscopic guidance. The internal jugular vein is immediately available through the same incision when the external vein is of inadequate size. Threshold potentials are determined for both electrodes, and optimum position of the electrode terminal is obtained. After complete connection of the permanent catheter to the permanent pulse generator the external pacing system is shut off and the procedure terminated. The patient is observed in the Intensive Care Unit for an additional 24 hours following implantation and during this period is monitored continuously by electrocardiogram. We have adopted the policy of leaving the external temporary pacing catheter in place in the right ventricle for the first 24 to 48 hours following implantation of the permanent system to insure availability of an effective pacing system in the event the permanent catheter dislocates from the right ventricle. We have never regretted this policy and have slept better knowing that the auxiliary pacing system is immediately available at the flip of a switch.

FOLLOW-UP

(4) Periodic long-term follow-up: It is essential to have three to six-month interval follow-up examinations, including chest x-ray and electrocardiogram. A decrease in contrast of the batteries on x-ray, a change in the rate of the pacing artifact (asynchronous unit) of more than four beats per minute, incomplete capture of the pacemaker or a decrease in amplitude of the artifact as seen on electrocardiogram are all signs of impending pulse generator failure.

During the period from Feb. 1967 to Sept. 1969, 22 patients have had implantation of permanent cardiac pacemakers at the North Mississippi Medical Center. Four patients have required replacement of the pulse generator, three for impending late battery failure and one for symptomatic competitive rhythm which developed one year after implantation of an asynchronous pulse generator. Twenty patients have had implantation of permanent transvenous endocardial units, and two patients received epicardial electrode systems. All patients have received Medtronic pacing units. Demand pulse generators

were used in 10 patients and 12 patients received asynchronous fixed rate units.

The ages of the patients ranged from 62 to 88 years, with a median age of 75. The electrocardiogram showed chronic complete heart block in 18 patients and intermittent block or arrhythmia in four patients. Fourteen patients had experienced syncopal attacks and eight patients had symptoms only of congestive heart failure. No patients had experienced angina. None of the patients were known to have developed block following myocardial infarctions. There was a wide variation in the duration of symptoms. Improvement in general strength and alertness of the patient was uniformly observed following implantation of pacemakers.

DISLOCATION

There have been two cases of early dislocation of the endocardial catheter tip from the right ventricle. The instance of this complication is reported at 10-15 per cent. We have adapted several advantageous technical maneuvers which have diminished the likelihood of this complication and have not experienced its appearance in any of the last 14 implantations. Dislocation of the catheter tip usually occurs within the first 24 hours following implantation, and thus we strongly feel the need for leaving the temporary pacing catheter in place for 24 to 48 hours following implantation of the permanent system. Dislocation of the permanent catheter tip is more likely if incomplete capture by the pacemaker is present or if multifocal idioventricular contractions are present. We have found the intravenous use of Xylocaine very helpful in suppressing these multifocal contractions in the early post-operative period.

We have experienced no cases of early or late myocardial perforations by the catheter tip. Most reported cases of perforation occurred in early series of cases when the electrode stylets were being left in place, and now that they are being removed this complication should be less frequent. We have had no cases of electrode breakage.

One patient experienced left diaphragmatic pacing for a brief period which cleared spontaneously. Close proximity of the pacing electrode to the left phrenic nerve causes this diaphragmatic twitching which can be bothersome though not detrimental to the patient. Several years ago we experienced this complication persisting until it was completely abated by crushing of the phrenic nerve in the neck.¹⁶

Infections occurring about a pacing catheter usually result in failure to pace and necessitates

staged implantation of a completely new unit at a different site.¹⁸ We credit the absence of any infections in this series to meticulous skin preparation and surgical technique with absolute hemostasis and the use of Hemovac suction for five post-operative days. Heavy prophylactic antibiotic coverage against gram negative and gram positive organisms was administered.

GENERATOR REPLACEMENT

Late battery weakness with incomplete capture by the pacemaker prompted replacement of the pulse generator in two patients, and an increase in rate of 12 artifact stimuli per minute in association with occasional sub-threshold stimulation 18 months after implantation with the indication for pulse generator replacement in one other patient.

There have been two early deaths, one secondary to pacemaker failure caused by post-pericardiotomy syndrome following implantation of an epicardial pacing unit. The second early death was caused by a pulmonary embolus in a patient who had a fractured hip pinned after implantation of a transvenous pacing system. There have been three late deaths. One patient developed a repetitive rhythm of exactly two times the pacemaker rate (asynchronous unit) and went into refractory ventricular fibrillation before the pacemaker catheter could be severed. Two patients died five and six months after implantation from progressive cardiac failure though they were being paced satisfactorily at the time of death.

SUMMARY

Within the last decade the development of reliable permanent pacing systems has dramatically altered the mortality and morbidity of heart block and Stokes-Adams attacks, so that patients with chronic slow heart beat can look forward to a more productive and longer life. There is no place for long-term drug treatment in the management of complete heart block. The "asymptomatic" as well as the symptomatic patient may require pacing. Development of a more durable energy source is now the primary objective in the improvement of pacing systems. The transvenous endocardial system is superior to the transthoracic epicardial system and should be the system applied to elderly patients suffering from Stokes-Adams attacks and chronic heart block. We feel that the demand pacing system is indicated in all patients requiring permanent pacing because of the elimination of repetitive and competitive rhythm as well as for conservation of battery strength. ★★★

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FREUDIAN SLIP

A young chaplain, new with the prison system, was sent to console an inmate soon to be electrocuted. As the prisoner was being led to the electric chair, the flustered chaplain, not wanting to say, "Goodbye," which sounded terribly final; or "See you later," that really wasn't what he wanted; finally spoke to the condemned man, "More power to you," he said.

—From the *Mississippi Educational Advance*

Artificial Kidneys In Acute Renal Failure

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ACUTE RENAL FAILURE may be defined as the sudden cessation of renal excretory and hemostatic function. It is divided into three classifications for diagnostic and therapeutic purposes. This classification consists of post-renal failure, pre-renal failure, and parenchymal renal failure. All of these have been discussed, and the mechanisms for diagnosing each of these parameters of renal function have appeared in a previous publication.¹ This paper then will deal with the management of parenchymal renal failure sometimes referred to as lower nephrosis, or preferably called acute tubular necrosis. Specifically, the use of the artificial kidney in the management of acute tubular necrosis will be discussed, and the results of experience in 35 consecutive cases of acute tubular necrosis requiring hemodialysis will be presented in detail.

Between Oct. 1, 1966, and Feb. 15, 1970, 160 hemodialyses were performed in 35 patients for acute renal failure. All of these had acute tubular necrosis except one who was dialyzed for gross fluid overload following ureteral ligation of her solitary ureter. Of these 35 patients, 20 are surviving and have had adequate return of renal function to maintain life without dialysis.

The precipitating factors, their frequency, and the survival rates in each group are shown in Table 1. It is seen that 11 of these 35 patients developed tubular necrosis in the post-operative period. This condition was usually associated with extensive surgical procedures accompanied by excessive bleeding or severe sepsis develop-

ing two to three days postoperatively. These patients were predominantly elderly and had a very poor survival rate. The next most common cause

During the last three years, 160 hemodialyses have been performed in 35 patients for acute renal failure at the University Medical Center. Twenty are still surviving. The author discusses the use of the artificial kidney in the management of acute tubular necrosis and presents the results of experience in these 35 cases.

of acute tubular necrosis was automobile accidents. Tubular necrosis in this group was due to excessive blood loss at the time of the automobile accident, or subsequent dehydration due to inadequate fluid replacement after the patient had been hospitalized. Nephrotoxic agents were the next most common cause.

One case was due to an overdose of Streptomycin, another to an overdose of Kanamycin, and one to carbon tetrachloride ingestion. One case resulted from prolonged inhalation of gasoline fumes with resultant severe pneumonia and acute tubular necrosis. The medical diseases that precipitated this condition were septicemia following cholecystitis, hypercalcemic nephrotoxicity of primary hyper-parathyroidism, massive gastrointestinal hemorrhage, and a case of non-ketotic hyperosmolar coma in a patient with diabetes mellitus. This category of medical diseases likewise carried a significant mortality with two

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of the patients dying of sepsis, and one of exsanguination.

Two cases of acute tubular necrosis resulted from gunshot wounds of the abdomen with multiple through and through perforations of the bowel, producing soiling in the peritoneal cavity and septicemia. Neither of these patients survived because of the extensive intra-abdominal and systemic septicemia. Two cases of acute tubular necrosis occurred in the post-partum period, both resulting from abruptio placenta. Both of these patients had adequate return of renal function after prolonged dialysis. One of these required three months to regain function. Criminal abortion was responsible for acute tubular necrosis in two cases, in one of which treatment was ultimately abandoned due to irreversible brain damage from multiple brain abscesses.

Two patients in this series received incom-

TABLE 1
PRECIPITATING FACTORS
IN ACUTE TUBULAR NECROSIS

		Survival	Per Cent
Post-operative	11	4	36
Auto accidents	5	4	80
Toxic agents	4	4	100
Medical disease	4	1	25
Gunshot	2	0	0
Postpartum	2	2	100
Abortion	2	1	50
Transfusion	2	2	100
Burn	1	0	0
Heat stroke	1	1	100
Drug reaction	1	1	100
	35	20	57.1

TABLE 2
MEDIATING FACTORS
IN ACUTE TUBULAR NECROSIS

		Survival	Per Cent
Sepsis	14	2	14
Hemorrhage	8	7	87
Dehydration	4	4	100
Nephrotoxin	3	3	100
Transfusion	2	2	100
Drugs	1	1	100
Renal emboli	1	1	100
Heat stroke	1	1	100
Obstruction	1	1	100

patable blood. Both of these had an adequate return of renal function. The other causes of acute tubular necrosis consisted of one burn with severe sepsis, a heat stroke with massive muscle heat coagulation, and an adverse drug reaction producing profound hypotension and shock.

TABLE 3
AVERAGE NUMBER OF DIALYSES

	No.	Total	Average/ Patient
Living	20	117	5.85
Dead	15	43	2.87

The mechanism by which acute tubular necrosis evolves is not known. No predictable animal model has ever been developed to permit precise quantitation of the variables involved in precipitating this condition. For this reason, many mediating factors have been speculated upon, but the most common factor seems to be renal hypoxia due to many mediating factors. The mediating factors in this series of acute tubular necrosis are shown in Table 2. Severe infection or sepsis is the commonest factor responsible for acute tubular necrosis in this series. Fourteen of the 35 patients who were dialyzed for acute tubular necrosis had the condition develop secondary to overwhelming sepsis. There was only a 14 per cent survival rate in this group. Again the great majority of these septic conditions developed in the postoperative period.

TUBULAR NECROSIS

Excessive blood loss was responsible for 8 of the cases of acute tubular necrosis with only one mortality. The remainder of the mediating factors did not cause any death in this series of patients with acute tubular necrosis. Dehydration was responsible for four of these conditions, and all were salvaged. The same is true of nephrotoxic agents which usually have an adequate return of renal function after the transient period of acute tubular necrosis. Both of the transfusion reactions did quite well. The patient recovered from acute tubular necrosis following shock secondary to drug abuse. One patient had a renal embolus which was removed from the renal artery with resultant adequate return of renal function. Both patients with heat stroke and obstruction of the solitary ureter had an adequate return of renal function.

The average number of dialyses per patient is shown in Table 3. Of the 20 patients that are

living, there were 117 hemodialyses performed with an average of 5.85 dialyses per patient. In the 15 patients who died, the average dialyses per patient was 2.87.

Of the 15 patients who died, the cause of death is shown in Table 4. It is seen that the overwhelming cause of death in patients suffering from acute tubular necrosis is sepsis. Thirteen of the 15 patients died of septicemia. Death was predominately due to gram negative organisms. One patient exsanguinated from a recurrent bleeding duodenal ulcer, and one patient had a cerebral vascular accident following dialysis. It is noteworthy that none of these patients died of uremia.

The relationship of age to survival and the distribution of acute tubular necrosis according to age is shown in Table 5. From this figure it can be seen that patients over 60 had very poor survival rates. The reason for this is due primarily to the fact that most of these patients were quite debilitated. Many had advanced arteriosclerosis and congestive failure in the pre-operative period. The great majority of the patients in this group came from the postoperative category and were also severely infected.

CONSERVATIVE MANAGEMENT

Acute tubular necrosis can be managed conservatively without the use of hemodialysis in the majority of cases. It is estimated that 80 to 90 per cent of cases of acute tubular necrosis can be handled by medical means. The series presented, however, is not representative of cases usually seen in the community hospital. By and large, the cases referred to the Medical Center have been screened by local physicians and for this reason the incidence of dialytic therapy is approximately 30 per cent.

Even when dialysis has been decided upon, the patient, in most instances, could be managed with peritoneal dialysis. The only advantage to hemodialysis over peritoneal dialysis is that it is much more rapid, and requires less time. Other factors being equal, however, unless the patient is extremely catabolic or has multiple perforations in the peritoneal cavity, then peritoneal dialysis will suffice. Many patients at the Medical Center are handled with peritoneal dialysis, but in the series presented the patients were treated with hemodialysis primarily because of the availability of this method of treatment, and the shorter period of time required to carry out this procedure. Many of the cases in this series were extremely catabolic and could not be handled by peritoneal dialysis.

The indications for dialytic therapy in the management of acute tubular necrosis can be made on either clinical or laboratory criteria. We use a composite of these two. We continue conservative therapy unless the patient's condition shows definite evidence of deterioration as manifested

TABLE 4
CAUSES OF DEATH
IN ACUTE TUBULAR NECROSIS

Sepsis	13
Hemorrhage	1
CVA	1
Uremia	0

by persistent nausea and vomiting, lethargy, disorientation, coma, convulsions, or overhydration. We also take into consideration the severity of the catabolic condition, the amount of necrotic or infected tissue that the patient has, and the time in the natural evolution of the disease in which we see the patient.

Chemical indications for dialysis include a rising potassium that cannot be controlled by a conventional method, a rapid rise of blood urea nitrogen above 150 mg. per cent, or in excess of 40 mg. per cent per day, and a serum creatinine in excess of 12 mg. per cent. If the serum creatinine is rising at the rate of 2 mg. per cent per day, this is compatible with severe impairment of kidney function unless there is extreme breakdown of muscle tissue in the patient. The degree of acidosis is also considered if the CO₂ combining power is below 14 mEq/L.

EARLIER DIALYSIS

More recently, we have adopted a policy of earlier rather than later dialysis, and we have also adopted the policy that once we have committed ourselves to this method of treatment dialysis should be used not only to remove the patient from the uremic state, but to bring his blood chemistries to within normal limits and maintain them at near normal limits. The availability of hemodialysis on a large scale has permitted us to achieve this objective in these patients.

All of our hemodialyses were performed using either the Kolff twin coil kidney, or the Kiil flat plate hemodialyzer. The patients routinely have an arterio-venous shunt installed between the radial artery and a forearm vein so that subsequent hemodialyses can be performed by the nursing staff. No blood prime is required to operate the Kiil dialyzer. This dialyzer is usually preferred for this reason.

Dialysis is performed for approximately 12 hours three to four times per week during the profound oliguric phase. In order to prevent the hazards of bleeding during the hemodialysis period the patient is kept on regional heparinization whereby protamine is infused into the blood just prior to returning to the patient to neutralize the heparin that is infused into the blood just as it is leaving the patient. The maintenance of normal clotting time as determined by the Lee-White method is possible with this technique.

When the patient is not on hemodialysis, the electrolytes, BUN, creatinine and CBC are determined at daily intervals. The rate of rise in creatinine and the onset of the diuretic phase are the primary determinations in discontinuing this method of therapy. When the patient is able to maintain his own serum creatinine and is putting out in excess of 1,000 ml. of urine per 24 hours, then hemodialysis is discontinued. Subsequent to this the patient will frequently undergo a diuretic phase and then have adequate return of sufficient renal function to maintain life.

In this series of 35 patients, there is a 57.14

TABLE 5
RELATIONSHIP OF AGE TO SURVIVAL

Age (Yrs.)	No.	Survival	Per Cent
10-20	3	3	100
20-30	4	4	100
30-40	6	3	50
40-50	4	3	75
50-60	9	6	66
60-70	6	1	16
70+	3	0	0

per cent survival rate. Twenty of the 35 patients left the hospital with adequate renal function to live. Of the 15 patients who succumbed in this

series, infection or septicemia was the precipitating cause of kidney failure in 12 cases. One additional patient was lost to sepsis in whom massive gastrointestinal bleeding was the cause of tubular necrosis. One additional patient died of hemorrhage, and one patient had a cerebral vascular accident shortly after hemodialysis was completed. The highest mortality occurred in post-operative patients. It is felt that the combination of malnutrition, severe underlying disease that prompted the surgery, and the septic state present in these patients are the factors determining the outcome in this series. The elderly patient has a much worse prognosis due primarily to the severity of his underlying disease, and other predisposing factors of his age.

SUMMARY

One of the major "spin-off" benefits of a chronic hemodialysis program is the availability of the artificial kidney for the management of acute renal failure. In the past 39 months we have performed 160 hemodialyses in 35 patients with acute tubular necrosis. Twenty of these patients have had an adequate return of renal function to maintain life without hemodialysis. Fifteen of these patients died. Of the 15 deaths, 13 were attributable to sepsis which in 12 instances was the cause of the acute tubular necrosis. Two additional deaths occurred, neither of which was related to uremic poisoning. All of the patients in this series were in need of dialysis as determined by the criterion previously stated. It is concluded then that in patients with acute renal failure, the survival rate is more dependent upon the etiology of the renal failure than upon the acute tubular necrosis itself. No patient should die of acute renal failure. ★★★

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Potassium Therapy And Gastrointestinal Lesions

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THE FIRST GROUP of thiazide diuretics was introduced into clinical use in 1957. Since increased potassium excretion is one of the effects of thiazides, potassium supplementation became a common procedure in thiazide therapy. The first of several combinations of a thiazide with potassium chloride in a single tablet was introduced in 1959. Prior to 1963, only 170 cases of primary nonspecific ulceration of the small intestine had been reported in the literature.¹

The first report that serious gastrointestinal distress was associated with KCl-thiazide therapy appeared in 1961, but received little attention.² The problem became of intense interest during 1964 with reports which linked stenosing ulcers of the small bowel with potassium-thiazide therapy.^{3, 4} Most of the patients involved had been treated with a thiazide, often supplemented with potassium. During 1964, two pharmaceutical companies in cooperation with the Food and Drug Administration analyzed records in 488 domestic and foreign hospitals. The results revealed that of 484 patients with the characteristic type of intestinal lesion, 275 (57 per cent) had a history of administration of either potassium, a diuretic, or both.⁵ Subsequent to these early reports linking small-bowel ulceration with potassium and/or diuretic therapy, reports of additional cases (Table 1), editorials and other comments have been published.²⁶⁻³³

The incidence of potassium-induced lesions of

the small bowel has been reported in several ways. Based on the total numbers of hospital records of all patients in 321 hospitals over 21 years, 211 out of 17,805,097 (1.2/100,000 patients)

Prior to widespread clinical use of thiazide diuretics in combination with potassium chloride only 170 cases of primary nonspecific ulceration of the small intestine had been reported in the literature. By 1964 reports linked stenosing ulcer of the small bowel with potassium-thiazide therapy. The author reviews pertinent literature and concludes that the KCl component of the tablets is the harmful entity. He notes that current evidence supports the primary vascular origin of the lesions.

definitely or likely had lesions of the type associated with potassium.³⁰ On a different basis, 11 out of 473 patients (2.3 per cent) who were on enteric-coated KCl administration were reported to have typical potassium-induced lesions.³ A third way of describing incidence is from the survey of Lawrason, et al.⁵ Of a total of 484 patients with typical lesions, 275 (57 per cent) had received diuretics or KCl. However, it has been pointed out that inaccuracies of record keeping would be responsible for a lower percentage of cause-effect relationships¹⁰ and Boley et al.⁴² note in a careful investigation of 125

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POTASSIUM THERAPY / Emerson

patients not included in the mass survey of Lawrason, et al, that potassium ingestion was established definitely in 93 per cent and probably in another 3 per cent. Their conclusion was that the increase of circumferential small-bowel lesions must be attributed to enteric-coated potassium.

Information linking potassium administration to small-bowel lesions resulted in FDA regulations on warnings for potassium salt preparations intended for oral ingestion by man. The warnings are not required on preparations dissolved in an adequate quantity of liquid so that the concentration of potassium is below a 20 mg/ml limit, if it is a prescription item, and if its labeling bears adequate information for use.³⁵ The FDA has recently proposed that all fixed combinations of diuretic and enteric-coated potassium be removed from the market. This action has been taken as a result of recommendations of NAS/NRC review panels that such combination drugs present more potential hazards than other types of potassium supplements which are available.³⁶

TABLE 1
SMALL-BOWEL LESIONS REPORTED
IN POTASSIUM THERAPY

<i>Therapy</i>	<i>Total Number of Cases^a</i>	<i>References</i>
Enteric-Coated KCl plus Thiazide or KCl alone . . .	411 ^b	3-24
Non-Enteric Coated K-Salts plus Thiazide	3 ^c	23-25

^a The Food and Drug Administration has recently reviewed records of 122 cases.³² Small-bowel lesions were found in 112 cases on thiazide-potassium enteric-coated tablets; 6 cases on diuretic plus enteric-coated potassium given separately; and 4 cases on oral diuretic without potassium.

^b In 275 cases reported by Lawrason, et al,⁵ type of diuretic was not specified; therapy was potassium, a diuretic, or both.

^c Includes 2 cases associated with potassium gluconate and 1 case associated with a potassium acetate-bicarbonate-citrate mixture.

The exhaustive retrospective studies of clinical records⁵ strongly indicated that the nonspecific intestinal ulcers seen in man were probably caused by enteric-coated tablets containing KCl plus a thiazide diuretic. Initial questions were raised that the ulcerations could have been caused by any or all of the ingredients of these

tablets. However, the incidence of the lesions was so small that statistical methods and large numbers of case reports had to be used to establish a cause-effect relationship. Only after animal experimentation was it shown that potassium chloride alone, and not the thiazide diuretic or the enteric coating of the tablet, was responsible for the injury to the intestinal tract.

DOG EXPERIMENTS

An experimental model in dogs simulated an extreme situation in which a tablet would be entirely dissolved over a short length of intestine.³⁴ Tablets included enteric-coated placebos, enteric-coated KCl, various enteric-coated thiazide-potassium preparations, and thiazides alone. The tablets were fixed within the ileum or distal jejunum so that dissolution and absorption of their contents occurred within a short segment of the intestine. No pathologic changes occurred from enteric-coated placebos or thiazides alone. With the KCl or the thiazide-KCl combinations, ulcerations occurred in varying degrees in both jejunum and ileum. The prerequisite for ulceration apparently was absorption of KCl in high concentration over a short length of bowel. There was a suggestion that higher doses of KCl caused more severe ulceration.

Enteric-coated tablets which contained placebo, thiazide, KCl, and thiazide plus KCl were administered to rhesus monkeys.³⁷⁻³⁹ Only KCl and KCl plus thiazide produced ulcerations; thiazide or enteric coats alone did not. The lesions were not consistently produced in the small intestine; sometimes the stomach, the cecum, or the colon were affected. It appeared that ulcerations usually occurred where the greatest amount of potassium chloride was released from the tablet. It became apparent that tablets with short disintegration times produced lesions in the stomach or upper intestine, while tablets with long disintegration times produced ulcerations in the lower intestinal tract. Liquid preparations containing approximately 13.5 mEq potassium per 5 ml. (equivalent to 1,000 mg. of KCl) were chiefly irritating to the stomach. Lesions were produced within five days by 1,000 or 250 mg. KCl in enteric-coated tablets twice daily. However, the 250 mg. dosage caused milder lesions which could not be predictably reproduced, while tablets of 100 mg. were without effect. Tablet dimensions were not a factor in production of lesions.

When the upper ileum of dogs was partially obstructed with Teflon bands, acute mucosal ulceration resulted from administration of KCl

alone or in combination with thiazides. Thiazides alone did not produce ulceration.⁴⁰

Lesions have appeared up to two years after discontinuing potassium administration;¹⁹ as few as two tablets have been implicated;⁷ age of patients has been as low as 2 years;¹¹ and lesions may be reversible in some cases.⁶ Recurrent, usually postprandial, crampy abdominal pain is the most frequent symptom; this is often associated with nausea, vomiting, and intermittent distention. In severe cases, acute surgical abdomen is present. Fever, anorexia, and malaise are usually absent; laboratory findings are nonspecific except for mild eosinophilia in some cases. Radiologic examination is of little assistance in establishing a diagnosis other than if the obstruction is complete or there is a perforation. Gastrointestinal series and small-bowel follow-through may suggest a malabsorption syndrome with coarse mucosal folds and dilated loops of small intestine, but usually the proximal jejunum and terminal ileum are normal. A careful review of the case history as to previous potassium therapy may be necessary to establish diagnosis.

CHARACTERISTIC ULCERS

The ulcers are characteristically circumferential, sharply delimited, and directly over the zone of cicatricial narrowing. They are usually solitary, sometimes double, rarely multiple and are most commonly found in the lower ileum, but also in the distal jejunum. The most important distinguishing feature of the stenotic phase is a band-like encirclement of the lumen by the lesion which varies in size from several mm. to several cm. In this phase, the segment of bowel proximal to the lesion is dilated approximately 1½ to 2 times and has a thickened muscularis; the distal segment is normal. The surrounding mucosa and muscularis may show varying degrees of edema, hypertrophy and hemorrhagic infiltration. The histologic picture depends upon the severity and duration of the lesions. Detailed descriptions of clinical manifestations, gross and histologic pathology, and therapy are given elsewhere.^{41, 42}

There are two main concepts concerning the mechanism by which potassium causes the lesions. The first is that potassium has a directly injurious effect on the mucosa.^{3, 23, 43} For example, potassium chloride solution injected into the intestine in concentrations similar to those obtained from the release of enteric-coated tablets containing potassium results in severe tonic contraction of the bowel, and an uncoated KCl tablet placed directly on the intestinal mucosa causes

superficial necrosis by the time it is completely dissolved.²³ However, several types of evidence lend greater support to the second concept that the lesions are caused by an insufficiency of blood to the affected part of the intestine.

RELEASE AND ABSORPTION

Briefly, Boley and co-workers postulate that the precipitating factor is the rapid release of potassium chloride and its absorption over a short segment of intestine.^{22, 34, 41, 42} The high concentration causes spasm or paralysis of the intramural and mesenteric vessels, predominantly veins, with slowing of blood flow and subsequent infarction of varying severity. Circumferential ulceration, either superficial or deep, or overt intestinal necrosis follows. Complete and rapid clinical recovery may follow the mildest degrees of injury. With greater damage, fibrosis with increasing stenosis produces progressive intestinal obstruction. The most severe injuries produce perforation or intraluminal hemorrhage.

Evidence in support of the hypothesis that potassium causes vascular insufficiency is from several sources.

(1) Mesenteric vascular insufficiency has been implicated as a cause of segmental ulceration and stenosis of the small bowel in conditions other than those caused by potassium.^{22, 44}

(2) Histologic examination of tissue taken from KCl caused lesions in man and animals indicates striking changes in mesenteric vessels, particularly arteries and veins. Sections show the lumens of vessels almost completely blocked with a thickening of surrounding tissue.^{12, 22, 41} Other studies have not revealed mesenteric vascular changes.^{3, 7, 23, 45} Allen, et al⁴¹ recognize this disparity in findings and discuss difficulties in examination of mesenteric tissue. They note that they have had the opportunity to study adequate sections of mesentery in man and animals.

VASCULAR INSUFFICIENCY

(3) Animal studies tend to be consistent with the hypothesis that KCl may result in a local vascular insufficiency. Schwartz, et al²² occluded the distal veins and arteries supplying the small intestine of dogs by injection of microspheres into the small branches of the superior mesenteric vessels. They were able to reproduce the typical ulceration with stenosis and dilatation complex found in patients with intestinal ischemia. They postulated that the role of potassium in the formation of similar lesions was also primarily vascular in nature.

Watson & Mark²⁴ ligated arteries and veins which supplied segments of the small intestine of dogs. When 5 to 7.5 cm. of the small intestine was rendered ischemic, changes occurred in the bowel wall which were grossly and histologically similar to those caused by the ingestion of enteric-coated KCl. If shorter segments were rendered ischemic, collateral blood supply prevented significant changes in the bowel; if longer segments were treated, hemorrhagic infarction occurred. These observations lent further support to the contentions that vascular lesions could cause changes of this type in the bowel wall and mucosa, and that it was not necessary to postulate direct injurious effects of potassium on the mucosa to explain the pathologic picture.

Myers, et al,^{53, 54} have recently suggested that the etiologic factor in stenosing ulceration is not a specific toxicity of the potassium ion, but involves the effect of local salt concentration. They observed that hypertonic solutions of both NaCl and KCl produced gross and microscopic injury similar to that seen in the early stages of primary non-specific small-bowel ulceration.

CARDIOVASCULAR PATIENTS

A high percentage of small intestinal lesions associated with potassium chloride administration are found in patients with some form of cardiovascular disease, although lesions have also occurred in a number of patients without such disease. A condition of arteriosclerosis, for example, might result in a critical reduction of blood flow to the small bowel and set the stage for focal infarction.

Mansfield, et al⁴⁴ found that potassium chloride tablets introduced into the distal part of the ileum of the dog produced acute inflammatory changes and occasional ulceration of the affected bowel. When partial interruption of splanchnic blood flow was accomplished by reducing the pressure in the superior mesenteric and celiac arteries, the magnitude of these drug-induced small bowel changes was increased.

The authors conclude that their observations support the clinical observations which indicate that enteric-coated potassium chloride tablets cause local inflammation or ulceration of the small bowel, and that a reduction of the local blood supply associated with vascular occlusive disease may predispose the patient to this complication. However, it must be noted that the greater incidence of lesions in cardiovascular pa-

tients may simply reflect a larger number of such patients on diuretic (and KCl) therapy. Furthermore, small intestinal ulcerations have been attributed to several causes other than vascular insufficiency or KCl administration.^{20, 21, 44, 46}

Boley, et al⁴⁷ compared the effects of the chloride versus the citrate and the gluconate salts of potassium using techniques similar to their previous study.³⁴ Only minimal superficial changes were found at the intestinal sites of potassium citrate or gluconate; however, in five of six dogs in which KCl was implanted, a gross circumferential infarction was present at the site of the salt, while all other sites of gluconate or citrate implantation were normal. These results suggest the relative safety of potassium citrate or gluconate as compared to potassium chloride and confirm clinical observations (Table 1) that the organic salts of potassium are safer than KCl.

REPORTED CASES

Baker, et al³ reported 11 cases of small bowel lesions out of an estimated 473 patients who received hydrochlorothiazide plus potassium chloride in enteric-coated preparations, but no lesions in an estimated 331 patients who received hydrochlorothiazide plus non-enteric potassium preparations, among them 31 patients who received potassium as the acetate, bicarbonate, and citrate. Boley, et al⁴⁷ speculate that since the underlying etiology is the rapid absorption of high concentrations of potassium over a short length of intestine, the various potassium salts may differ in their effect because of different rates of absorption.

All of the potassium salts ionize almost immediately and completely, but the absorption of a cation across the intestinal wall is at least partially controlled by the rate of absorption of the respective anion. Absorption rates of ions such as gluconate (large and monovalent), or citrate (large and trivalent) are slower than that of the smaller monovalent chloride ion. The slower absorption of these organic anions would help prevent the rapid release of potassium over a short segment of intestine and diminish the concentration of potassium in the intestinal wall veins at any one time.

THIAZIDE DIURETICS

Olive baboons were given two preparations of thiazide diuretics containing KCl: one consisted of an outer coat of hydrochlorothiazide 25 mg. surrounding an enteric-coated core containing

572 mg. KCl; the second consisted of cyclopenthiiazide 0.25 mg. in the outer shell with a wax slow-release core containing 600 mg. KCl.⁴⁵ The enteric-coated KCl produced lesions similar to those reported in man; the slow release form had no deleterious effects. The author suggested that the slow-release form was safer.

Whether or not slow-release forms are safer is open to question since Diener, et al^{37, 38} indicated that gradual release tablets are more apt to release sufficient KCl in the stomach to cause gastric irritation. Furthermore, studies on release rates of various KCl preparations⁴⁸ indicate that slow release forms would tend to place the KCl in the stomach, while enteric-coated forms would tend to release their contents in the small intestine. In fact, the main reason for the development of enteric-coated tablets is to prevent release of certain types of medicines in the stomach to avoid gastric irritation and to provide rapid release in the small intestine,^{49, 50} although there was no evidence of sudden release and absorption of one type of enteric-coated KCl tablets.⁵¹

It appears that the relative safety of potassium therapy is in terms of adequate dilution such as provided by several liquid or effervescent dosage forms, particularly of organic salts of potassium.

SMALL-BOWEL LESIONS

Small-bowel lesions associated with enteric-coated KCl-thiazide preparations are caused by the KCl component of the tablets. The lesions are characteristically non-specific, circumferential, and consist of stenosis with or without ulceration. The reported incidence is approximately 1/100,000 total hospital patients; probably over 90 per cent of patients with typical lesions have ingested potassium. Current evidence supports the primary vascular origin of the lesions and suggests that chronic vascular insufficiency predisposes the small bowel to injury by KCl. The safest dosage forms of potassium are those which have been diluted in an adequate amount of water, particularly those which contain organic potassium salts.

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SWINGING GRANDMA

"What Grandma needs," someone said at the supper table, "is some real warm weather if she's going to get relief from her rheumatism."

Johnny listened carefully and remembered to include her in his prayer that night, saying, "Lord, please make it hot for Grandma."

Recent Advances in Newborn Care

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MISSISSIPPI TODAY faces a most serious health problem in its high infant mortality rate. The scope of this problem is extremely far reaching as regards the number of lives lost each year and the high incidence of central nervous system damage occurring in prematurely born infants and in infants who have had serious disease in the neonatal period. The economic aspects, both from the standpoint of prolonged costly care of the mentally retarded person and the loss in economic productivity of these citizens, are equally overwhelming, to say nothing of the grief and disappointment to the family of a retarded child. Thus, from both a health and an economic point of view, the state could profit by reducing the infant mortality and morbidity.

A review of the infant mortality data for Mississippi and its comparison with other southern states and the United States, helps to give some perspective to the problem. (Figure 1 is a graph reproduced from the *Vital Statistics of Mississippi, 1967*.) This graph depicts the infant mortality by race from 1920 to 1967. The State Board of Health analyzes this graph as follows: "There were 1,645 deaths of infants under one year of age in 1967; this total was 211 less than in the previous year and the smallest ever recorded in Mississippi. The infant death

rate of 35.3 per thousand live births was also the smallest on record and may indicate a downward trend after about 20 years during which there was no improvement. Both race groups experienced declines, but that for the non-whites was considerably larger.

Recent developments in care of the newborn have the objective of reducing Mississippi's infant mortality rate. This article is first of a six month series designed to bring the newest diagnostic and treatment methods to the physician in the local community hospital. The series is edited by Dr. Alfred W. Brann, Jr., of the University of Mississippi School of Medicine. He and the authors will be glad to respond to readers' questions.

"The accompanying graph of infant mortality by race clearly illustrates the lack of progress in bettering infant health since 1946. The line for the whites shows that although improvement continued at a slower pace until 1955, there has been very little change since then. The curve for the non-whites shows an even worse situation, an upward trend from 1946 through 1965; however, the unusual drop in 1967 is a hopeful sign."

From the Department of Pediatrics, University of Mississippi School of Medicine, Jackson, Miss.

NEWBORN CARE / Brown

"Even though Mississippi's infant death rate in 1967 was the lowest in its history, it was still the highest in the United States, exceeding the national rate by 58 per cent and that for South Carolina which had the next highest rate in the South, by 28 per cent. Moreover, Mississippi's race specific rates were also higher than the corresponding national figures, that for whites 16 per cent higher and that for non-whites 32 per cent higher."

Another interesting statistic in the breakdown of the infant mortality is that there are more deaths in the first year of life than there are in the next thirty years of life exclusive of the first year. A statistic which is a bit more pertinent to the over-all thrust to encourage an upgrading of neonatal care, is the fact that two-thirds of the deaths in the first year of life occur in the first month of life and most of these deaths are in the

first three days of life. In the total over-view of the United States in its relationship with other nations, it is also interesting that the U. S. ranks below some 15 other countries in its over-all infant mortality rate. Although infant mortality is of major consideration, infant morbidity, particularly as it relates to brain damage that is so frequent, must also be dealt with.

However, the encouraging point, as all of these statistics are viewed, is the fact that there are areas in the world and areas in this country and indeed in this state that have very low infant mortality rates, comparable to the lowest rates in the world. This fact alone gives indication that the available information and the environmental setting can be achieved to reduce infant mortality and morbidity, if the "tools" and "know-how" are properly applied.

There have been many recent developments in the understanding of the physiological proc-

Vital Statistics Mississippi - 1967

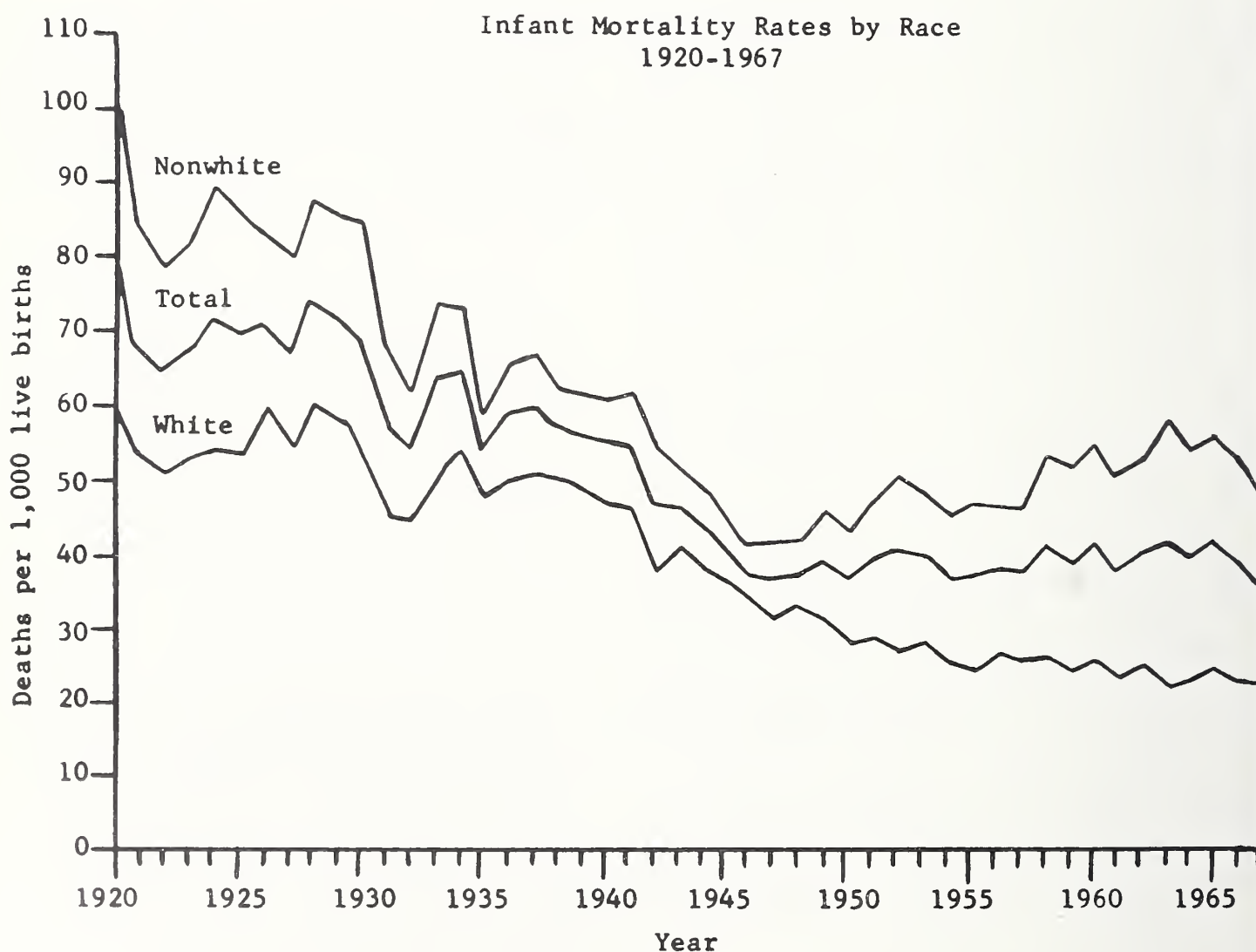


Figure 1

TABLE 1
DANGER SIGNS IN THE NEWBORN*

<p>A. <i>Cardio-Respiratory System</i></p> <p>Difficult or rapid (>60) respirations</p> <p>Rapid (>160), slow or irregular pulse</p> <p>Cough</p> <p>Cyanosis</p> <p>Apnea</p> <p>B. <i>Nervous System</i></p> <p>Abnormal cry</p> <p>Full fontanelle</p> <p>Abnormal head size (normal 31-37m.)</p> <p>Convulsions</p> <p>Jitteriness</p> <p>Excessive irritability</p> <p>Hypotonia</p> <p>Lethargy</p> <p>Paralysis</p> <p>C. <i>Orthopedics</i></p> <p>Incomplete hip abduction</p>	<p>D. <i>Gastro-Intestinal System</i></p> <p>Excessive salivation</p> <p>Vomiting bile</p> <p>No meconium stool in 48 hours</p> <p>Abdominal distention</p> <p>Abdominal mass</p> <p>E. <i>Genito-Urinary System</i></p> <p>No urine in 24 hours</p> <p>Dribbling urine</p> <p>Ambiguous genitalia</p> <p>F. <i>Hemopoietic System</i></p> <p>Jaundice</p> <p>Petechiae</p> <p>Bleeding from cord or circumcision</p> <p>G. <i>Miscellaneous</i></p> <p>Any congenital malformation</p> <p>Single umbilical artery</p> <p>Abnormal facies</p> <p>Cord odor or exudate</p> <p>Fever or hypothermia</p> <p>Change in behavior or condition (not looking right)</p>
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* Modified from a chart of the Newborn Center, Denver Children's Hospital.

esses that take place when the fullterm infant becomes a newborn.¹ Advances have been made in the detection as well as the understanding of diseases that are produced when deranged physiology occurs following a difficult or abnormal birth. Care has improved for the critically ill newborn ranging from simple measures to very complicated intensive care centers especially designed for the neonate.

INFORMATIVE STUDIES

The usefulness of this new information is readily apparent when data from the Collaborative Perinatal Study sponsored by the National Institutes of Health—National Institutes of Neurological Disease and Stroke is reviewed. This study² revealed that in infants whose condition was excellent at birth that the percentage of neurological deficit was in the range of 1.4 per cent. In infants who were depressed at birth, even though they were fullterm infants, there was a steadily increasing rate of neurological deficit in those patients who were more depressed.

From both human data and experimental animal data, there are certain biochemical and physiological abnormalities that may occur in utero, during birth, or in the immediate postnatal period which are closely associated with brain damage. These are all *potentially treatable conditions*

through good medical and nursing detection and therapy. These conditions are hypoxia, acidosis, hypoglycemia, hyperbilirubinemia, hypocalcemia, hyponatremia, hypernatremia, hypothermia, and hypotension. In addition to these biochemical and physiological abnormalities, infection also plays a great role in producing much of the brain damage seen in the neonatal period.

Many diseases that present themselves in the newborn period have their onset in utero. Although it would be much better to attack the problem of the in utero patient and prevent the disease process in the newborn, many times the infant who may get into difficulty cannot be predicted. Thus until more refined methods of detecting fetal abnormalities are available, the sick neonate will have to be dealt with in the best possible fashion.

Although the term, intensive care, has primarily been used around large medical centers, it is felt that this term and concept as regards the newborn must be carried to the local community hospital, where most of the sick newborns are cared for. Although most hospitals cannot provide extremely specialized care, they can and some do have the needed equipment for resuscitation of the newborn, for regulation of temperature, for oxygen administration and monitoring, and for laboratory techniques that will permit detection of the above mentioned abnor-

malities. A very significant phase in the correction of some of these biochemical abnormalities is the recognition of disease, which in the newborn, can be more difficult than in the older child or adult. If these signs and symptoms are recognized and correctly diagnosed, many of the problems in the newborn period can be cared for at the local community hospital. However, at times there is a need for referral to a neonatal intensive care center that can care for complicated medical and surgical problems.

Two approaches have been found to be useful in recognition of disease in the newborn period. First, it is known now from experience that certain babies can be identified in utero or immediately at birth as having a greater chance of developing difficulties than other babies. In this case, these babies should be earmarked and observed more closely for signs and symptoms of disease. Second, there are certain signs and symptoms that may develop in the first three to four days of life in the newborn infant which have consistently been associated with a distressed sick neonate. When both of these alerting systems are used, the index of suspicion and recognition of disease increases. The two alerting systems, *Infants at Potential Risk* and *Danger Signs in the Newborn* (Tables 1 and 2), are listed below.

TABLE 2
INFANTS AT POTENTIAL RISK

Infant of diabetic mother
Infant of toxemic mother
Infant of mother with fever
Infant of Rh negative mother
Infant of O mother
Ruptured BOW for 24 hours
Third trimester bleeder
Difficult labor or delivery
C-section delivery
Apgar less than 7
Abnormal birth weight for gestational age
Premature infant
Multiple births

Since there have been so many changes in newborn care, and since so many of these developments are applicable to the care of the newborn in the local community hospital where, as stated above, most of the sick newborns are cared for, a series of articles has been designed

to bring some of this information to the readers of this journal. The title of this series of articles will be "Seminar on Care of the Newborn." The series will attempt to correlate the new advances in diagnosis and care with the above listed alerting signs. As presently designed, these articles will run some six months and will cover problems that have seemed to be most frequently recurring in the newborn period.

FUTURE TOPICS

The initial article will deal with causes of a depressed infant at birth and methods of resuscitation in the newborn period, with very specific recommendations for equipment needed in the labor and delivery room together with recommendations for specific methods in drugs for resuscitation. The second paper will cover infections in the newborn period. It will include septicemia, meningitis, pneumonia, and diarrhea, the most common infections in the first month of life. Clinical manifestations, diagnostic procedures, and antibiotic therapy will be discussed.

The third article will deal with hematological problems in the newborn specifically, jaundice, anemia, and hemorrhagic disease of the newborn. Comments regarding therapy for hyperbilirubinemia, such as exchange transfusion and phototherapy will be discussed. The fourth paper in the series will deal with surgical emergencies occurring in the newborn.

The fifth article will deal with central nervous system disease in the newborn period. This topic will include a discussion of neonatal seizures, anoxia, bilirubin toxicity to the central system, congenital malformations and brachial plexus palsy. The sixth article in the series will discuss endocrine and metabolic diseases that affect the newborn, as well as other congenital and acquired metabolic diseases.

The series of articles, as stated above, is primarily oriented toward discussion of recent advances in newborn care as they most directly apply to the local community hospital. If there are any specific topics that would better serve this end, suggestions can be sent to the author for consideration in this series of articles. ★★★

2500 North State St. (39216)

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Radiologic Seminar XCVI

Reversible Vascular Occlusion of the Colon

C. D. BOUCHILLON, M.D.

Laurel, Mississippi

REVERSIBLE VASCULAR occlusion of the colon is a roentgenologic and clinical entity. Clinical and experimental evidence indicate that its manifestations may subside without sequelae and unnecessary surgery may be avoided by prompt recognition.

When the blood supply to the colon is compromised as a result of changes in the vasculature due to local lesions (thrombosis, embolism) or secondary to remote causes (shock, congestive heart failure, hemorrhage), ischemic damage may occur.

Marston et al have divided ischemic colitis into three clinical patterns (a) transient ischemic colitis (b) ischemic stricture (c) gangrene of the colon. The patterns correspond to the degree of vascular insufficiency, either arterial or venous. Minor insufficiency causes transient reversible colitis, moderate ischemia produces mucosal and some deeper damage and results in some stricture formation, and severe ischemia results in irreversible gangrene.

A decade ago the more severe disease was emphasized, but we now know that the milder forms are much more common. Our emphasis here is on the reversible form of the disease. Clinically, the symptoms vary considerably, but typically they present in an elderly arteriosclerotic man with abdominal pain, usually some



Figure 1—2.20.65. Barium enema examination shows the eight cm. area of irregular thickening of the wall of the mid descending colon. Typical "thumbprinting," or pseudotumor indentations (arrows) are due to submucosal hemorrhage. Ulceration is not evident, and could not be expected at this early stage of ischemia.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Jones County Community Hospital.

diarrhea, rectal bleeding, and abdominal tenderness. The presence, of course, of an abdominal aneurysm or history of aortic graft would particularly suggest the diagnosis.

The sequence of events in reversible vascular occlusion is (a) submucosal hemorrhage with associated intraluminal bleeding and appearance on barium enema study of thickening of the wall locally, so-called thumbprinting or pseudotumor appearance and intermittent spasm, (b) gradual subsidence of the hemorrhages and pericolic fat inflammation with improvement of the thickened wall on the radiograph, (c) development of superficial ulceration, (d) healing with or without narrowing of the colon.

CASE PRESENTATION

Case presentation: Mr. G. W., age 70, arteriosclerotic, presented with two hours' onset of cramping abdominal pain in the left abdomen, vomiting, left abdominal tenderness, and mild leukocytosis. Six hours later he developed bloody diarrhea. Clinical impression was diverticulitis.

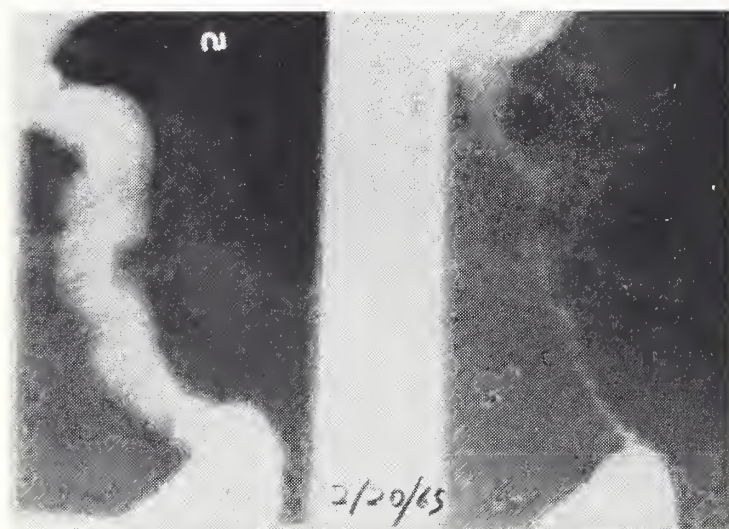


Figure 2. Spot films made on the above examination reveal the slight change in the caliber of the lumen, indicating that intermittent spasm is also present.

A barium enema examination twenty-four hours after onset of symptoms revealed typical findings of localized colon ischemia with irregular thickening and edematous appearance of the wall of the mid descending colon, with pseudotumor formation, "thumbprinting" indentations, plus intermittent spasm.

He responded rapidly to supportive measures plus antibiotics, and was asymptomatic two weeks

later. A follow-up colon examination five weeks after the original one revealed the colon to appear entirely normal. Also, three subsequent colon examinations during the next three years were negative with no sign of stricture formation.



Figure 3. Follow-up examination five weeks later, and two weeks after the symptoms cleared, reveals the descending colon to now appear entirely normal.

The differential diagnoses to be entertained from the roentgen appearance on the initial study are principally intramural tumor, lipomatosis, pneumatosis coli, and juxtacolonic inflammatory disease.

Abdominal angiography is rarely helpful here as this is a disease of the small vessels.

Some pertinent points are:

1. The appearance of the lesion on x-ray will vary with the stage of the disease, but the important point is that it continued to improve on subsequent colon examinations performed during the next few weeks.

2. The ulcerations are superficial and difficult to visualize on the film. On any one study they

might resemble any other form of localized ulceration. Indeed, some investigators believe chronic intermittent ischemia plays a major role in the etiology of chronic ulcerative colitis, the basis of the ischemia being a variety of factors including allergic and psychogenic phenomena. In reversible ischemia, however, the improvement is fast and the colon is typically normal in four to six weeks. Later, stricture may develop, and follow-up examinations are in order.

3. It must be emphasized that the course of the vascular occlusion of the colon cannot be predicted on the initial roentgen examination. These findings must be correlated with the clinical course. If symptoms persist, surgical intervention is indicated, for two reasons: either the diagnosis of vascular occlusion is wrong, or the viability of the involved bowel is uncertain.

Jones County Community Hospital (39440)

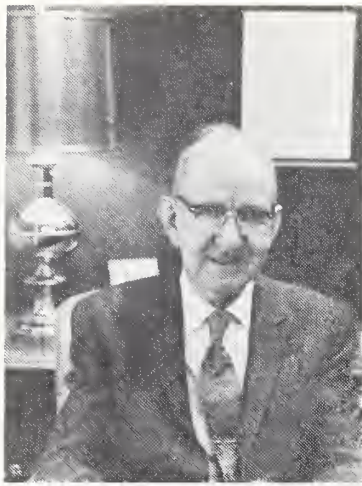
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THE HIGH AND THE DIDIE

The lodge brothers filed out 10 minutes after they'd entered. "What's wrong?," a late arrival gasped.

"No leader," replied a brother sadly. "Our Grand, All-Powerful, Invincible, Most Supreme, Courageous, Unconquerable Potentate had to stay home and baby-sit."



The President Speaking

'Changes and Challenge'

PAUL B. BRUMBY, M.D.

Lexington, Mississippi

FOR THE 102ND TIME the physicians of Mississippi assembled recently at Biloxi for study and to learn of the recent advances in medical science and practice.

Great changes have occurred even in our own assembly since the passage and implementation of Public Law 89-97. This is the law that has given us Medicare and Medicaid and also promised quality health care without limit as a right, and not a privilege to be earned. Medical care by definition was changed to health care, and health itself was defined as a state of physical, mental, and social well-being. This health care is to be given in a dignified manner acceptable to the patient and must be furnished with reverence.

This is the concept that has given us Mound Bayou, Marks, CHIP, Fayette and the projected Milton Olive and South Delta projects with their clinics and famous outreach programs previously staffed by persons from outside the South. The addition of social well-being to the definition of medical care is a concept with which we must live.

However, the most pressing demand to be met in our government programs is the policing of our own ranks. Competent and fair peer review offers the only solution which can prevent office and hospital audits, and more of the arbitrary decisions by the independent fiscal agents of various programs. Too, peer review committees will be most useful in combatting our own HB 407 which would legally establish the doctrine of *res ipsa loquitur* to the great detriment of our members and the great, great increase in our malpractice insurance costs. I quickly add that our present low insurance rates are the result of the efforts of our society.

Our patients know that we are serving them with a singular devotion. In return, we have their deep appreciation and devotion in spite of our growing negative image which is being created by the press and others outside our ranks. ★★★



Abortion and the Law: Anachronisms Racing Science

I

THE SUPREME COURT of the United States has agreed to review the decision of the federal trial court in striking down the District of Columbia abortion law. The decision, expected in the fall of this year, may well write the last chapter in the debate which had encompassed medical, religious, academic, and legal groups. And the odds are that most restrictions against therapeutic abortion on state statute books will become invalid.

The view is popularly held that prohibitions against abortion proceed primarily from moral bases. It is true that major religious bodies have assumed moral and theological positions on this question. The Catholic Church opposes abortion *per se*, while most Protestant denominations are either liberal or accept a limited policy toward the procedure.

The Orthodox Jewish faith is said to permit abortion only to save the mother's life, while the Reformed faith is less restrictive. The American Medical Association made its first new utterance on the subject in more than 70 years at the Atlantic City annual convention in 1967. A minority of the states have revised their statutes. The debate continues, but the issue may soon be re-

solved, at least from a legal point of view. What remains to be answered is the translation of the resolution into clinical practice. This is a matter far from resolution.

II

Within the past three years, 10 states have modified their abortion laws along the lines recommended by the American Law Institute. These are Arkansas, California, Colorado, Delaware, Georgia, Kansas, Maryland, New Mexico, North Carolina, and Oregon.

In 1966, the Mississippi statutes were amended to permit abortion when the pregnancy results from forcible rape. Hawaii was the first state to enact an "on-demand" abortion law, requiring only that the fetus be nonviable, that the patient be a resident of the state for 90 days, and that the procedure be undertaken only by a licensed physician in a licensed hospital.

A similar law enacted in Maryland was vetoed by the governor, but an on-demand measure was signed by New York's Nelson Rockefeller.

In three states, constitutional tests of abortion laws have gone to the state supreme courts. The California tribunal swept aside its ancient statute authorizing abortion only to preserve the mother's life as unconstitutional because of vagueness

and uncertainty of intent. What could have been the landmark ruling failed, however, because the U. S. Supreme Court declined to review the decision.

The Massachusetts Supreme Court upheld the constitutionality of the state's antiabortion law against charges of vagueness similar to those brought in California. But the key case was *U. S. v. Vuitch* in the District of Columbia. The federal district court declared the statute unconstitutional on the basis of its being vague. While it is not clear why the U. S. Supreme Court accepted the D. C. appeal while declining California's it may be that the D. C. statute is more nearly representative of most states in that it permits abortion only "when it is necessary to preserve the mother's life or health."

Mississippi's law, sponsored, incidentally by the state medical association in 1952 as a criminal law, permits therapeutic abortion only to save the mother's life. The issue 18 years ago was not liberalizing the law but putting teeth in it against illicit abortions. Even as amended in 1966, the Mississippi statute is one of the most archaic and conservative.

The association's new position, a result of adoption of Resolution No. 2 at the 102nd Annual Session, would extend the circumstances under which the procedure may be undertaken.

III

The most ancient civilizations practiced abortion. Hippocrates mentions it in the oath, where he pledges not to give a woman an instrument to produce abortion. Until the 19th century, abortion during early months of pregnancy was not prohibited by law in any nation in the world. The first such law was enacted in England in 1803, and the first statute in the United States was passed by the Illinois legislature in 1827. But the first state to proscribe therapeutic abortion as such was New York in 1829.

From that point on, the idea caught on, and by 1875, virtually every state had enacted some sort of antiabortion law. But the objectives appeared to be more medical than legal, because our forefathers were not so preoccupied with abortion as they were with the consequences. The New Jersey Supreme Court, in an 1848 decision, ruled that the purpose of the state's abortion law "was not to prevent the procuring of abortions so much as to guard the health and life of the mother against the consequences of such attempts." There are valid questions in the minds

of many legal authorities if there were really a moral intent in most of the state laws.

But the science of medicine leaped far ahead of the laws which regulate it. The safety of the procedure in the proper clinical environment is well-established. New knowledge has entered the picture, and medical reasons for abortion have changed almost completely.

IV

The picture on criminal or illicit abortions in the United States is cloudy, too. Estimates of "experts" vary from 10,000 such procedures each year to more than a million. One legal authority noted these extreme variations and said wryly that "when the data vary by 600 per cent, you do not know the answer."

One effect of the ancient state laws, however, is much more susceptible to valid statistical analysis. Under our restrictive laws, white middle-class women have, by far, the greatest number of therapeutic abortions. In one study in New York City, the ratio of therapeutic abortions to term births in *private* hospitals was 1:1,250, while the ratio in municipal and *charity* hospitals was 1:20,000.

A few authorities have speculated that failure of civilization to employ contraception effectively and to withhold liberalization of abortion laws might result in the denial of the freedom to have more than a prescribed number of children. This is a dismal prospect, although we are finding out every day we live that Malthus was correct when he said that the population would outgrow the food supply.

Medicine's position is moderate on abortion, believing that it should be undertaken to preserve life or health of the mother, when the pregnancy results from rape or incest, or when there is a probability that the child will be born deformed. This is generally the objective in liberalizing state laws—to arrive at this legal posture. But the Hawaii law and the *Vuitch* case may change all of this, and the law may jump ahead of the science to create new problems.—R.B.K.

The CBS Eye: Color It Yellow

The color trademarks of NBC and ABC are respectively a peacock and a red-white-and-blue monogram. After "The Promise and the Practice" and "Don't Get Sick in America," we have a suggestion for CBS: Be sure to get enough yellow

in that video orb to portray accurately the network's jaundice against American medicine.

The two hour-long documentaries were editorials, pure and simple. The viewpoint was clear: CBS is all-out for national compulsory health insurance, closed panel practice, reorganization of care, and about everything else anti-establishment to medicine. Regrettably, networks are *not* subject to Federal Communications Commission proscriptions about program content—at least not yet. The law on equal time, good taste, and that sort of thing applies to the licensees or the TV stations. The networks, then, are the wholesalers.

It is disappointing to see Mississippi television stations broadcast this sort of distorted, lop-sided, slanted airfare with nary a word to the public about hearing the other side. It has long been established that CBS and NBC are antimedicine, because in 1962 when the celebrated Madison Square Garden speech by the late President Kennedy was carried, only ABC would give medicine equal prime time.

This brings to mind the classic statement by Leo E. Brown, a senior AMA executive, who noted in 1962, after CBS had filmed extensive footage of then-President Leonard Larson which was never put on the air, that "the truth about American medicine lies on a CBS cutting room floor."

This recent distortion which was an assault is destructive, not constructive. There were no positive suggestions, only despair, inequity, fee-slugging, waiting lines, and inaccessible hospitals. Slander and untruth hurt their victims, and medicine was hurt by this CBS onslaught. It seems to be part of the pattern, but medicine will tell its story if it be door-to-door, patient-to-patient, and state-by-state. And the day is fast dawning when the airwaves will be cleaned up one way or the other, more than likely station-by-station, and make the television entrepreneurs observe the law.—R.B.K.

Goods and Services Simply Cost More

The cost of medical care? Yes, it is substantial, particularly hospital care. Other cost components in total health services behave astonishingly like other goods and services which we must purchase. An interesting comparison was published by the authoritative and objective *U. S. News and World Report*.

Says the noted weekly: Hospital costs lead

the upward spiral with operating room charges up 67 per cent and semiprivate rooms up 86 per cent. The time base is 1965, and the survey covers five years through January 1970.

Auto insurance went up 38 per cent in this period, and mortgage insurance, 38 per cent. Household workers (the magazine did not say how to get one) had wage increases of about 45 per cent, and haircuts were up 33 per cent.

In the same five-year period, physicians' fees were reported to have been increased about 38 per cent and dentists' fees were up just over 30 per cent.

While *USNWR* did not analyze the trend in depth, it should be apparent that those who provide professional services must also purchase goods and services themselves. Not just as consumers, mind you, but as necessary prerequisites to operating their practices. The physician is paying more for his nurse, his secretary, his professional premises, and virtually everything implicit in his practice.

American medicine is acutely aware of the cost picture in providing health services. Every medical organization worthy of its name has pledged to provide the best care consistent with conservation of the health care dollar. We need to concentrate on this problem, because as Dr. James L. Royals, 1969-70 president, said in his recent address, "The cost of health care is rapidly becoming unacceptable to the public."

Obviously, no sugar-coated explanation makes more palatable spending money for something you don't want in the first place, illness or injury. Such outlays are usually unplanned, too, and health care expenditures often deny us something we would much rather have. After all, who wouldn't, at this season of the year, rather buy a new outboard motor than have his gallbladder out?

But we do need to communicate and safeguard. This is the positive story which needs telling.—R.B.K.



PERSONALS

DEMPSEY T. AMACKER of Natchez has been named to Emory University's Committee of One Hundred. The Committee is composed of prominent Methodist laymen in the Southeast who have a special interest in ministerial education.

THOMASINA BLISSARD of Jackson was featured speaker at Belhaven College's alumni luncheon

PERSONALS / Continued

on May 2. Dr. Blissard limits her practice to psychiatry.

JULIAN BRAMLETT of Oxford has joined the staff of Yalobusha County General Hospital at Water Valley. Dr. Bramlett will maintain his office in Oxford but will be on call for service at this hospital.

DUANE C. BURGESS of Hattiesburg gave a talk on drug abuse to the last meeting of Camp School PTA in Hattiesburg.

C. HAL CLEVELAND of Gulfport was elected president of the Louisiana-Mississippi Ophthalmological and Otolaryngological Society at its 32nd annual meeting in Biloxi. Other Mississippians elected to office were ARTHUR V. HAYS of Gulfport, secretary; RALPH SNEED of Jackson and JULIAN E. BOGGS, JR., of Columbus, counselors.

ALTON B. COBB of Jackson appeared on a panel before the Mississippi Medical and Surgical Association, Inc., at its 70th Anniversary meeting. His topic was Medicaid.

ERNEST EDWARD ELLIS of Laurel, OSCAR WILSON IRBY and PRESTON RAY STODARD of Meridian, THOMAS J. McDONALD of Mantachie, WESLEY L. MCFARLAND and CHARLES JULIUS COX of Bay St. Louis have been re-elected to active membership in the American Academy of General Practice. Re-election signifies that the physician has successfully completed 150 hours of accredited postgraduate medical study in the last three years.

THOMAS GANDY of Natchez exhibited part of his collection of the pictorial history of old Natchez at the 1970 Arts Festival in Jackson.

KARL HATTEN of Vicksburg has been elected chairman of the District Two Heart Association. Dr. Hatten will represent Claiborne, Issaquena, Sharkey, and Warren counties of the state organization's Board of Directors.

C. A. HOLLINGSHEAD has associated with W. B. WHITE and T. R. HOWELL in the Laurel Medical-Surgical Clinic.

Four physicians have been appointed to one-year terms on National Academy of General Practice committees: JOHN B. HOWELL, JR. of Canton, Committee on Insurance; MAX L. PHARR of Jackson, Committee on Mental Health; WILLIAM E. LOTTERHOS of Jackson, Executive Com-

mittee of the AAGP; and HARDY B. WOODBRIDGE, JR., of Jackson, Committee on Cancer.

I. C. KNOX, JR. of Vicksburg has been reappointed to the Vicksburg School Board for a five year term ending in 1975.

WESLEY W. LAKE of Gulfport was the recipient of the Mississippi Heart Association's 1970 Gold Award at the association's annual assembly in Jackson.

JAMES GEORGE LOGAN of Natchez has been cited in The Encyclopedia of American Biography, New Series, of the American Historical Company, Inc., copyright 1970.

WILLIAM E. LOTTERHOS and DAVID B. WILSON of Jackson and W. L. JAQUITH of Whitfield attended the 1970 meeting of the President's Committee on Employment of the Handicapped in Washington, D. C.

ROBERT L. MCKINLEY, JR., of Tupelo has removed his offices to 805 Garfield for the practice of neuropsychiatry.

SHELBY W. MITCHELL of Ellisville was guest speaker for the annual dinner meeting of the Lauderdale County Tuberculosis and Respiratory Disease Association. Dr. Mitchell is acting director of the Lauderdale County Health Department.

VAN B. PHILPOT of Houston delivered a paper before the Federation of American Societies at their 54th annual meeting in Atlantic City. Dr. Philpot recently received his second patent in the field of snake serum for studies of the protease inhibitor in control of hemorrhage.

WALTER T. TAYLOR of Clarksdale has been elected chairman of the District Four Heart Association. Dr. Taylor will coordinate the volunteer activities in Coahoma, Quitman, Tallahatchie and Tunica counties.

CLIFFORD TILLMAN of Natchez was re-elected to serve as director of the District One Heart Association and member of the Mississippi Heart Association Board of Directors at that organization's annual assembly in Jackson.

VIRGINIA S. TOLBERT of Ruleville recently addressed the Ruleville Woman's Club meeting. Her subject was leukemia and arthritis.

JOHN R. YOUNG of Natchez has been named the new chairman of the Executive Committee of the Adams County Republican Party.



NEW MEMBERS

The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association.

BLAYLOCK, DARRELL NOLON, Greenville. Born Purvis, Miss., Sept. 25, 1936; M.D., University of Mississippi School of Medicine, Jackson, 1962; interned Baptist Hospital, Nashville, Tenn., one year; medicine residency, same, July 1, 1963-June 30, 1964; medicine residency, City of Memphis Hospitals, Tenn., July 1, 1964-July 31, 1966; elected April 8, 1970 by Delta Medical Society.

DAY, LARRY HALE, Hattiesburg. Born Shaw, Miss., Aug. 31, 1937; M.D., University of Mississippi School of Medicine, 1952; interned Brooke General Hospital, San Antonio, Tex., one year; otolaryngology residency, University Medical Center, Jackson, Miss., July 1, 1965-June 30, 1969; elected March 12, 1970 by South Mississippi Medical Society.

GILES, WILLIAM GARY, Hattiesburg. Born Hattiesburg, Miss., Feb. 11, 1934; M.D., Louisiana State University School of Medicine, New Orleans, 1964; interned Southern Baptist Hospital, New Orleans, one year; surgery residency, V. A. Hospital, New Orleans, July 1, 1965-June 30, 1966; orthopaedic surgery residency, Campbell Clinic, Memphis, Tenn., July 1, 1966-June 30, 1969; elected March 12, 1970 by South Mississippi Medical Society.

HAMMETT, LARRY JOE, Hattiesburg. Born Fort Worth, Tex., Sept. 18, 1937; M.D., Louisiana State University School of Medicine, New Orleans, 1963; interned Confederate Memorial Medical Center, Shreveport, La., one year; pediatric residency, same, July 1, 1964-June 30, 1965; otolaryngology residency, same, July 1, 1965-June 30, 1969; elected March 12, 1970 by South Mississippi Medical Society.

HARTNESS, DURWARD STANLEY, Kosciusko. Born Kosciusko, Miss., May 14, 1942; M.D., University of Mississippi School of Medicine, Jackson, 1968; interned, University Medical Center, Jackson, Miss., one year; elected Dec., 1969 by North Central District Medical Society.

HOOVER, JACK CLIFFORD, Pascagoula. Born Gyp-

sum, Kan., Jan. 27, 1933; M.D., Tulane University School of Medicine, New Orleans, La., 1962; interned U. S. Naval Hospital, Pensacola, Fla., one year; residency, U. S. Naval School of Aviation Medicine, Pensacola, Fla., Oct., 1963-April, 1964; obstetrics and gynecology residency, University Medical Center, Jackson, Miss., July 1, 1966-June 30, 1969; elected Dec. 15, 1969 by Singing River Medical Society.

SCOTT, EDWARD GRAY, JR., Meridian. Born Riderwood, Ala., March 23, 1931; M.D., Tulane University School of Medicine, New Orleans, La., 1963; interned McLeod Infirmary, Florence, S. C., one year; general practice residency, E. A. Conway Charity Hospital, Monroe, La., July 1, 1964-Dec. 31, 1964; medicine residency, V. A. Hospital, New Orleans, La., Jan. 1, 1965-Dec. 31, 1966; medicine residency, Oschner Foundation Hospital, New Orleans, Jan. 1, 1967-Dec. 31, 1967; cardiology fellowship, same, Jan. 1, 1968-July 1, 1968 and V. A. Hospital, New Orleans, July 1, 1968-Jan. 1, 1969; elected April 7, 1970 by East Mississippi Medical Society.

SMITH, JIMMIE LAWSON, DeKalb. Born Meridian, Miss., Nov. 29, 1936; M.D., University of Mississippi School of Medicine, Jackson, 1968; interned Pensacola Educational Program, Fla., one year; elected Dec. 2, 1969 by East Mississippi Medical Society.

WARD, RODERICK DHU, JR., Raymond. Born Rolling Fork, Miss., Aug. 1, 1930; M.D., University of Mississippi School of Medicine, Jackson, 1968; interned St. Vincents Infirmary, Little Rock, Ark., one year; elected March 3, 1970 by Central Medical Society.



DEATHS



COWSERT, LOUIS EARNEST, Ocean Springs. M.D., University of Illinois School of Medicine, Chicago, 1951; interned St. Francis Hospital, Evanston, Ill., one year; surgery residency, Union Hospital, West Frankfort, Ill., July 1, 1952-June 30, 1957; died May 3, 1970, age 48.



TRUDEAU, EUGENE ALEXIS, Biloxi. M.D., Creighton University School of Medicine, Omaha, Nebr., 1925; interned Emergency Hospital, Washington, D. C., one year; died May 1, 1970, age 72.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 21-25, 1970, Chicago, Clinical Convention, Nov. 29-Dec. 2, 1970, Boston. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Southern Medical Association, 64th Annual Meeting, Nov. 16-19, 1970, Dallas. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

STATE AND LOCAL

Mississippi State Medical Association, 103rd Annual Session, May 3-6, 1971, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Robert P. Henderson, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday, April and First Wednesday November, 2:00 p.m., Clarksdale. Walter T. Taylor, P.O. Box 1237, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. C. Hal Cleveland, P.O. Box 1018, Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Restaurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, April and October. Cherie Friedman, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. James E. Booth, Eupora, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. M. Howell, 139 Kirkwood St., Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, June, September, and December. Donald E. Dore, Singing River Hospital, Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. W. B. White, Medical Arts Bldg., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.



Book Reviews

Fundamentals of Inhalation Therapy. By Donald F. Egan, M.D. 468 pages with 148 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$11.00.

The author of this excellent book states that it is intended "primarily for the student inhalation therapist and for the working therapist requiring a reference for review." The book consists of 12 chapters dealing with pertinent chemistry, gases, cardiopulmonary physiology, aerosol and humidity therapy, gas therapy, inhalation therapy, and the inhalation therapist's responsibilities to the chronic care and rehabilitation of patients with respiratory failure. The final chapter describes the organization of the inhalation therapy department and its interrelationship with other medical and hospital functions. Many useful charts are found in the appendix.

The author presents his material in a lucid manner and obviously has had considerable experience both in treating patients with respiratory problems and in teaching inhalation therapists. The book is authoritative, well illustrated, and has an excellent current bibliography with an adequate index. His use of chemical formulae is held to the minimum necessary to explain basic chemical and physiologic principles relating to inhalation therapy. The chapters on "Aerosol and Humidity Therapy," "Gas Therapy," "Mechanical Ventilation," and "Inhalation Therapy Management of Ventilatory Failure," provide an excellent in-depth discussion of the respective subjects.

The only major deficiency is the author's failure to stress the absolute necessity for "sterile" nebulizers and ventilators. Although he describes this equipment in great detail, he virtually ignores the unique ability of nebulizers and respirators to cause severe illness and even death from bacterial contamination. Such a problem deserves strong emphasis on current methods aimed at preventing or minimizing this serious complication.

Inhalation therapists will find this publication

to be a valuable and informative reference. In addition, it will be especially useful to physicians interested or involved in inhalation therapy and to those who have the responsibility for developing an inhalation therapy section. It will be of special worth to residents or to fellows in pulmonary disease who will profit not only from the book but from knowing what the author describes as "the minimum knowledge for the safe and effective administration of inhalation therapy."

GUY D. CAMPBELL, M.D.

Handbook of Ocular Therapeutics and Pharmacology. 3rd Edition. By Philip P. Ellis, M.D. and Donn L. Smith, M.D., Ph.D. St. Louis: The C. V. Mosby Co., 1969. \$10.75.

This book was written to serve as a quick reference for the busy practitioner who may have forgotten a specific dose or side reaction of a certain drug, as well as a reference to treatment of specific conditions.

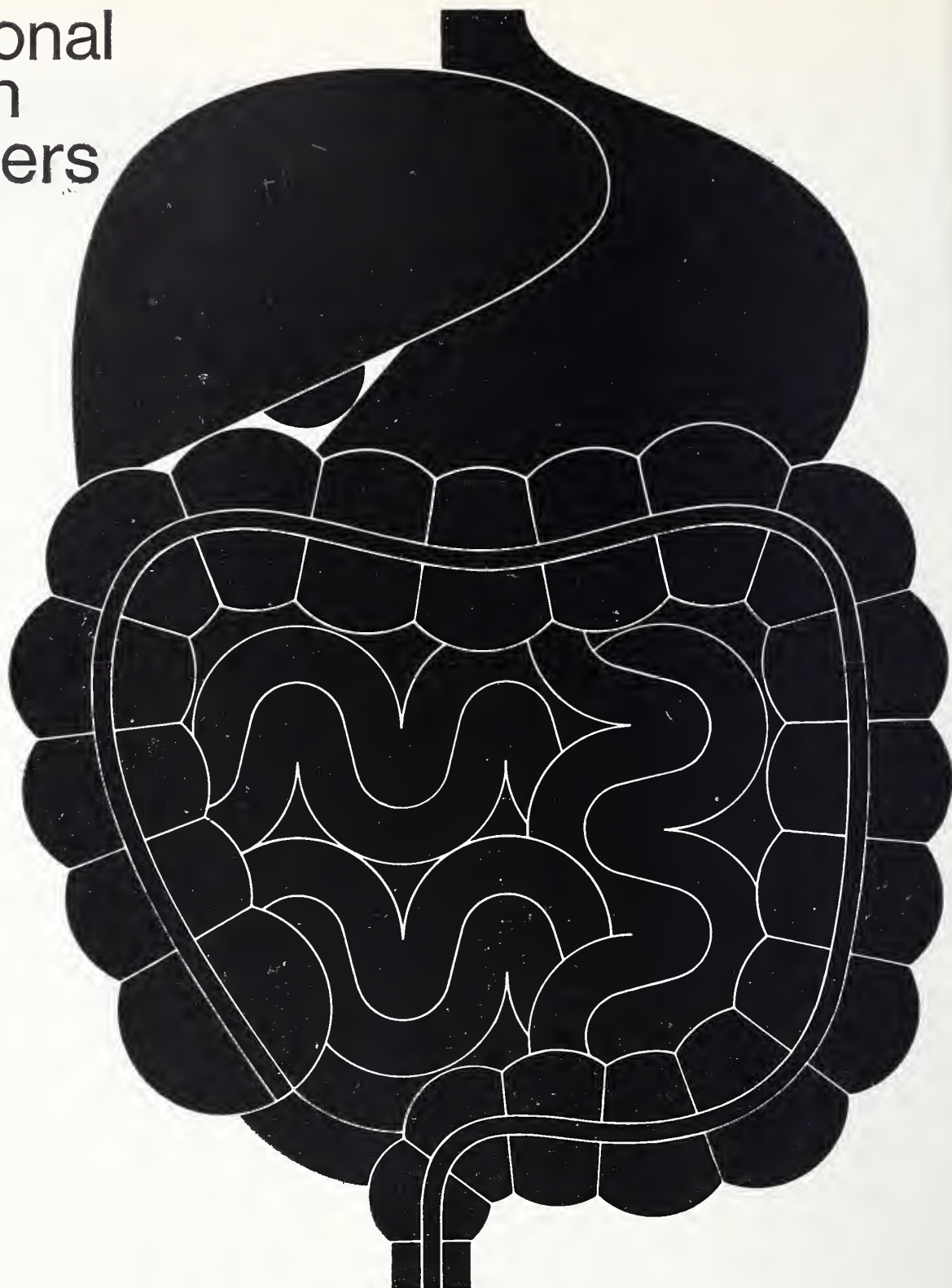
It is divided into two sections. The first section, on therapeutics, summarizes the present medical therapy of most ocular disorders. The chapter on intraocular infections contains much valuable information, but is disappointing in one respect. Perhaps the authors' poor success in using intracameral injection comes from using the buffered preparations presently available or in using too large doses. This subject needs more thorough investigation and re-writing.

The second section, on pharmacology, presents the most commonly used medications that a practicing ophthalmologist would have occasion to administer. The action, uses, side reactions, contraindications, preparations and dosages of these drugs are presented. A section on pediatric dosages is included.

The authors present very complete and specific information in extremely lucid and concise form. The third edition brings the information up to date. This book should be in the office of every physician treating eye diseases.

JOSEPH B. ROGERS, PH.C., B.S. PHAR., M.D.

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Dr. Brumby Is Inaugurated President, Dr. Brown Is Named President-Elect

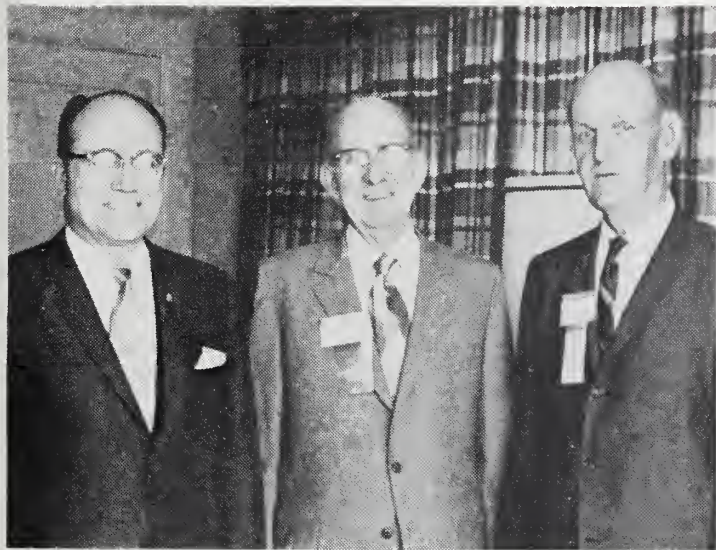
Dr. Arthur E. Brown of Columbus was named president-elect of the Mississippi State Medical Association at the 102nd Annual Session, and Dr. Paul B. Brumby of Lexington was inaugurated 1970-1971 president, succeeding Dr. James L. Royals of Jackson.

Twelve specialty societies met concurrently with the Scientific Assembly before which a total of 38 essayists appeared. Sixty scientific and technical exhibits were presented to meeting registrants.

Scene of the meeting was the Buena Vista hotel and motel at Biloxi. Registration totaled 996 with 543 members, 115 physician-guests, 210 mem-



The president and chairman of the Board of Trustees welcome the new secretary-treasurer, Dr. Raymond S. Martin, Jr., of Jackson, center, who is congratulated by President Brumby and Board Chairman Mal. S. Riddell, Jr.



Three years of the association's presidency are represented by, from left, Drs. James L. Royals, 1969-70; Paul B. Brumby, 1970-71; and the new president-elect, Arthur E. Brown, 1971-72.

bers of the Woman's Auxiliary, 114 exhibitors and other guests, and 14 staff.

A busy House of Delegates acted on 21 reports and 13 resolutions with a 14th lying on the table until 1971 in two meetings. Meanwhile, reference committees heard debate, comment, and suggestions leading to policy decisions.

In his address to the opening meeting of the House of Delegates, Dr. Royals discussed the care delivery system which he characterized as being on trial. He said that "agencies of government engaged in care financing are attacking the system, a variety of proposals for radical change are heard in the halls of Congress (and) insurance and Blue plans are introducing subtle influences upon it."

He called for adjustment to change by physicians but urged them to assume greater roles of leadership by "an inquisitive outreach in a constant search to improve and a willingness to experiment with promising change" in what he called hallmarks of medical progress.

The president hit hard on medical manpower shortages, pointing out that Mississippi has only half the physicians-to-population ratio as the national average. He called for carrying care to the poor and said that "while the majority of Mississippians receive excellent care, many do not."

"We must in all candor and honesty recognize that there are large groups in our state who re-

ceive little or no medical care," he asserted. He said that "it is not sufficient for us to proclaim that we never turn a patient away or to say that we will care for anyone who comes to us."

He called for taking care to the economically, intellectually, educationally, and emotionally deprived.

Dr. Royals said that in the midst of all of this, we must also look within, seeking effective means for self-regulation and the making of worthy and responsible judgments which will be accepted by third parties and other sponsors of care financing. He called for a statewide system of peer review.

The president commended the Board of Trustees in organizing a Committee on Peer Review, and he asked the House to make it permanent with adequate staff and financing. He said that counterpart committees must be organized at local level. Failing to do this, he said, "we shall certainly be judged by others."

Calling on physicians to participate fully with

time, effort, and means, he said that "the most tragic hour in American medicine comes when a physician withdraws himself in spirit and substance from medical organization.

"He renders himself impotent, and he chips a stone from our foundation," he added. "The whole is never greater than the sum of its parts, and no man is an island. His dissent should not be translated into destruction of his organization, of his colleagues, or of himself. He simply does not have that right."

The delegates gave Dr. Royals a standing ovation and applauded the unanimous action of the House approving the address.

Also appearing before the House of Delegates as principal guest speaker was Dr. Gerald D. Dorman of New York, president of the American Medical Association.

Through the Committee on AMA-ERF, a check for \$11,100 from the association and Auxiliary was presented to the University of Mississippi School of Medicine.

New vice presidents are Drs. John R. Lovelace

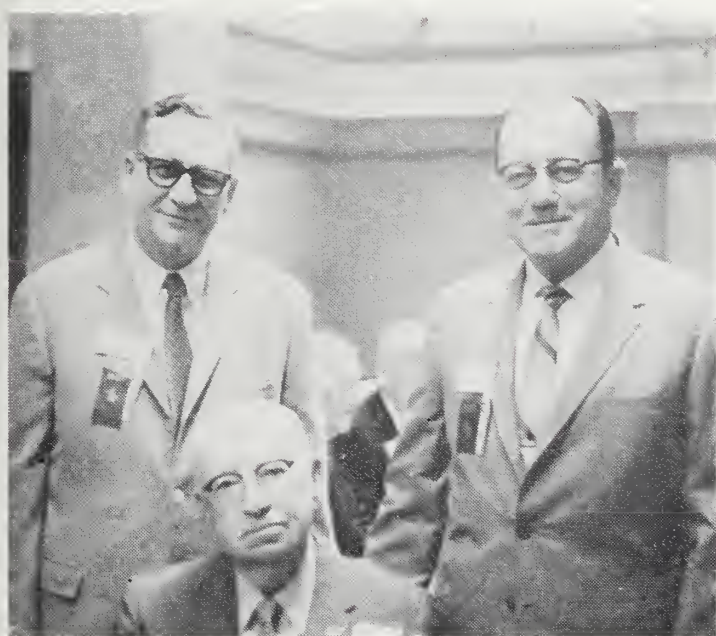


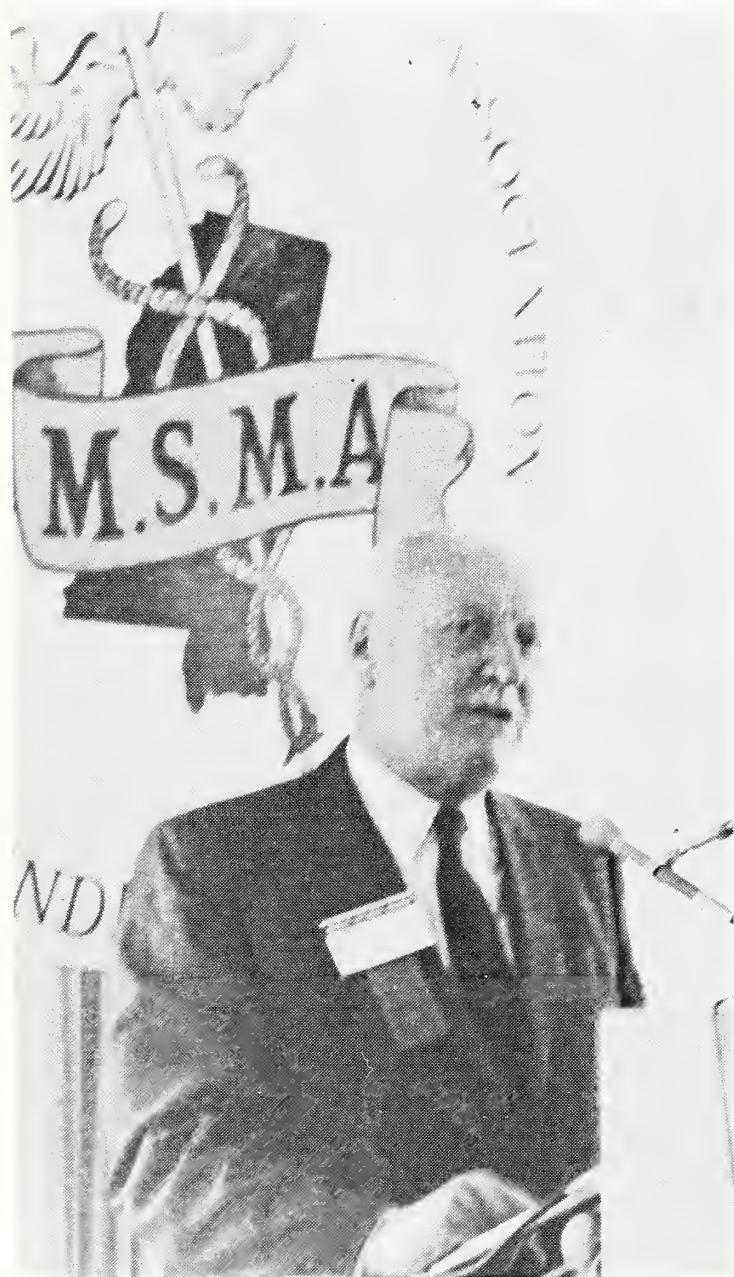
Dr. J. T. Davis of Corinth, vice chairman of the Board of Trustees, studies scientific exhibit by UMC Department of Surgery on management of coronary

occlusion. Scientific exhibit was biggest in years with 21 presentations.



The Reference Committee on Medical Practices listens intently to member discussing a resolution. From left, Drs. W. B. Howard, Joseph E. Johnston, Louis A. Farber, Chairman Joseph B. Rogers, and Clyde A. Watkins. Assistant executive secretary Cody Harrell listens in foreground. Left, Immediate Past President Rogers, President Royals, and senior living past president, Dr. Gus Street of Vicksburg, reflect on association progress. Right, Dr. Brumby is inaugurated 1970-71 president as Executive Secretary Rowland B. Kennedy holds association's historic Bible and Board Chairman Riddell administers oath of office.





Past presidents of the association enjoy fraternal and traditional breakfast with special guests, Drs. Royals and Brumby, candidates for select circle. Left, Dr. Gerald D. Dorman of New York, president of the American Medical Association, appeared as principal guest speaker of the annual session. He addressed the House of Delegates at opening meeting.



A Fifty Year Club "freshman," Dr. J. A. K. Birchett of Vicksburg, replete with beanie, receives coveted certificate and gold lapel pin from Board Chairman Riddell. The club is sponsored by the Board of Trustees to honor physicians who have practiced 50 years in Mississippi.



Dr. James P. Spell of Jackson, right, receives Aesculapius Award and cash honorarium from Scientific Assembly Chairman Walter H. Simmons for best scientific exhibit by a member of the association. Subject of Dr. Spell's presentation was "Systemic Clues to Occult Cancer."

of Batesville, J. Dan Mitchell of Jackson, and Eldon L. Bolton of Biloxi.

Re-elected as associate editor of the JOURNAL was Dr. George H. Martin of Vicksburg.

Dr. C. D. Taylor, Jr., of Pass Christian was named delegate to AMA. Elected alternate delegate to AMA was Dr. Stanley A. Hill of Corinth.

Dr. Lyne S. Gamble of Greenville was elected Trustee from District 1. Re-elected to Trustee posts were Drs. James O. Gilmore of Oxford, District 2, and J. T. Davis of Corinth, District 3.

Dr. Raymond S. Martin, Jr., of Jackson was elected Secretary-Treasurer. Named to councils were Dr. Daniel L. Hollis of Biloxi, Council on Budget and Finance; Dr. Arthur E. Brown of Columbus, Council on Constitution and By-Laws; and Dr. Charles N. Floyd of Gulfport, Council on Medical Education.

Elected to the Judicial Council were Drs. William E. Weems of Laurel, District 7; Wendall B. Holmes of McComb, District 8; and Dr. James T. Thompson of Moss Point, District 9. Dr. Thompson will serve as chairman.

New members of the Council on Legislation are Drs. Arthur A. Derrick of Durant, District 4; John G. Caden of Jackson, District 5; and Frank H. Tucker, Jr., of Meridian, District 6.

The Council on Medical Service has three new members: Dr. C. R. Jenkins of Laurel, District 7; Dr. Jack A. Atkinson of Brookhaven, District 8; and Dr. Bedford Floyd of Gulfport, District 9.

Dr. William E. Lotterhos of Jackson was re-elected Speaker of the House, and Dr. John B.

Howell, Jr., of Canton was named to another term as Vice Speaker.

Delegates Act on Big Agenda at 102nd

A heavy agenda of 21 reports and 14 resolutions made for a busy House of Delegates at the 102nd Annual Session during the May 11-14 Biloxi meet. Emerging from a year of intensive activity, the Board of Trustees submitted seven reports to the House.

Principal business items before the delegates included peer review, care delivery, the Himler Report pending before AMA, intensified legislative program, membership for medical students, the state abortion law, limited licensure for foreign trained physicians, and association finances.

Acting on a recommendation of the Board of Trustees, the House accorded constitutional status to the new Committee on Peer Review and made it a parent body to counterparts at component medical society level. The committee succeeds the state Grievance Committee in its former functions and also will examine the quality of care and offer its services in making responsible judgments for third party financing mechanisms.

A number of related policy actions reaffirmed the association's support of the private care delivery system, including assumption of a leader-

ANNUAL SESSION / Continued

ship role in working with agencies of government, third parties, and organizations sponsoring care plans.

The delegates agreed that the massive and complex Himler Report, referred to each state association by AMA, could not be disposed of at the annual session. In a three-part action, the House approved those portions of the report which included previously-established policy, agreed that information gathering as recommended in various sections be undertaken, and asked for a task force to study and disseminate information on the remainder, much of which is controversial.

The House also asked that the Himler task force report to the 103rd Annual Session in 1971 with a view toward concluding work on the document with "a final policy disposition."

Adopting another Board recommendation, the delegates called for a positive legislative program with a personal commitment from every member of the association. Additional staff was authorized for day-to-day liaison, and continual physician-to-legislator contact was urged. The Emergency Medical Care Unit at the Capitol will be continued, operating during sessions of the legislature.

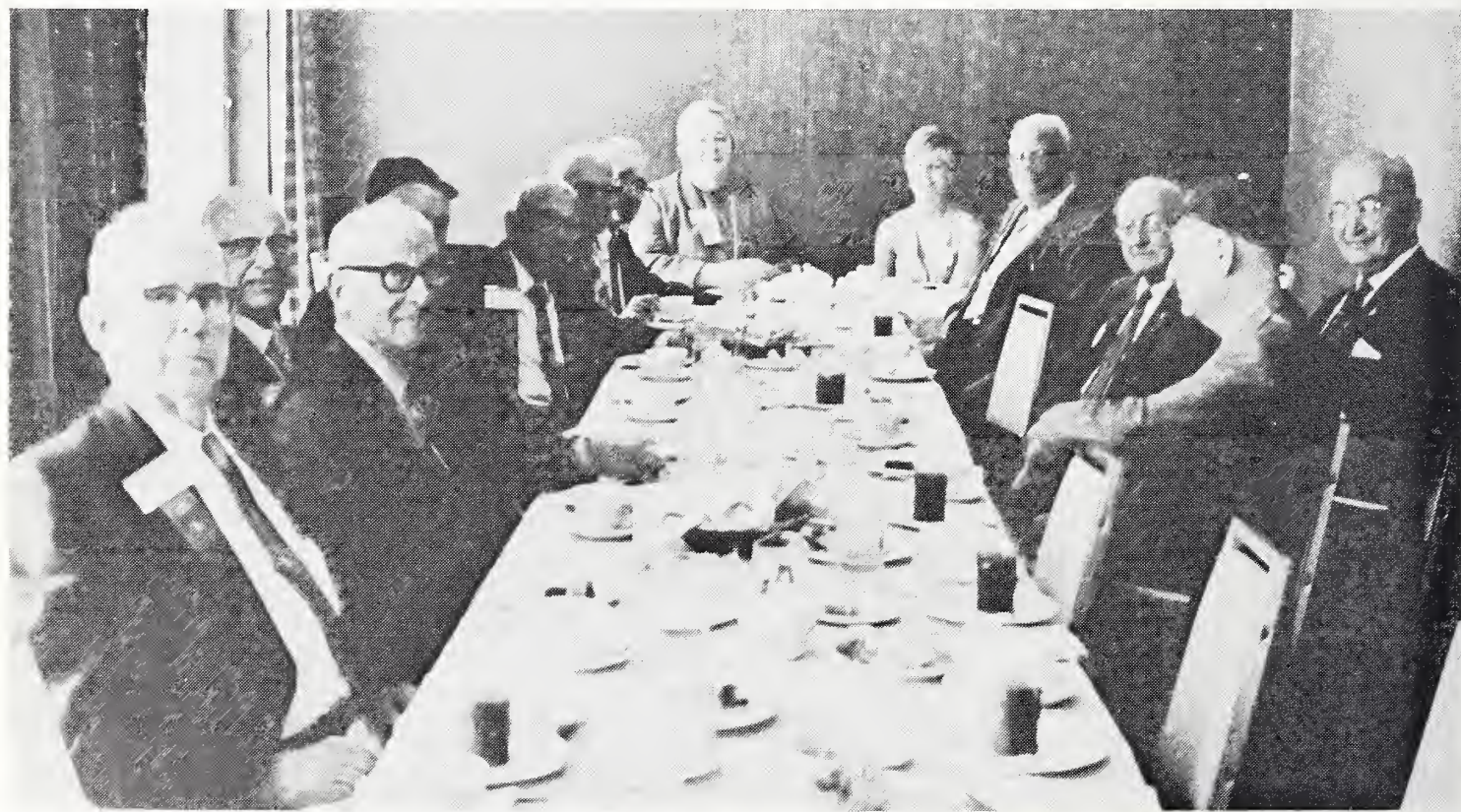
The House approved a resolution authorizing the Board of Trustees to establish a degree of membership for junior and senior medical students and to create on a provisional basis a new component medical society for this purpose at the University Medical Center.

A new policy on the state's abortion law would forbid the procedure except when the pregnancy results from forcible or statutory rape or incest, when continuation of the pregnancy poses a threat to the health or life of the mother, or when, in cognizant medical opinion, there is a probability the infant will be born deformed.

The procedure, the policy statement continues, should be undertaken by a physician only when consultation has been obtained in writing from another physician and is performed in a licensed hospital.

Another key action was approval of limited licensure for carefully selected foreign trained physicians for practice limited to state institutions. Licentiates would have to be approved by the superintendent of the institution and his governing board, the local medical society, the district association Trustee, and the medical member of the State Board of Health for the area.

Acting favorably on two items, a major report from the Board of Trustees and a resolution from the Delta Medical Society, the House approved a

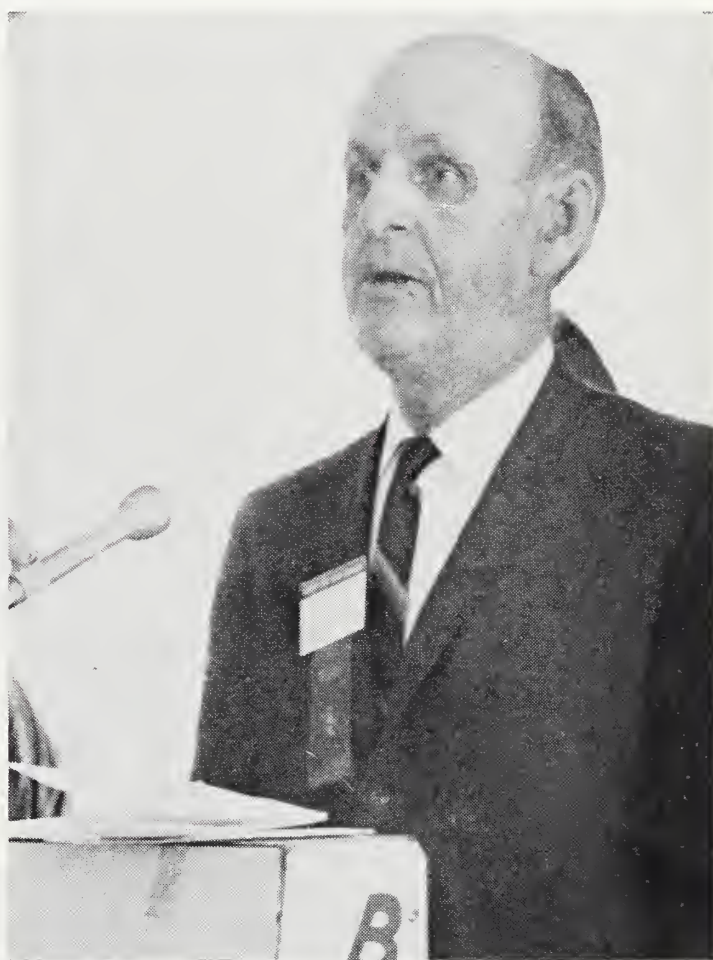


Members of the Fifty Year Club at annual session participated in special luncheon meeting. Club "officers" are Board Chairman Riddell, at head of

table, and Cindy Sanders, association membership director who serves as club secretary.



Dr. W. J. Aycock of Calhoun City was winner of 1970 MSMA-Robins Award for outstanding community service by a physician. President Royals applauds honoree as family joins in congratulations. Right, House Speaker William E. Lotterhos follows floor discussion as he presides. Right, Dr. Brown accepts office of president-elect in remarks to House of Delegates.



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Formula:

CANDEPTIN Vaginal Ointment contains a dispersion of candidin powder equivalent to 0.6 mg. per gm. or 0.06% candidin activity in U.S.P. petrolatum. 3 mg. of candidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain candidin powder equivalent to 3 mg. (0.3%) candidin activity dispersed in starch, lactose and magnesium stearate.

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Contraindications:

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dues increase to \$100 for state association dues effective in 1971. The increase is earmarked for peer review, legislative work, the building amortization, and inflationary increases in routine operations.

The House also approved a new system of dues billing by the executive office to relieve volunteer physician-secretaries of component societies of the task. The billing will include dues for the local society, state medical association, AMA, and voluntary dues for MPAC and AMPAC.

In other actions, the House of Delegates:

—Commended the secretary-treasurer, Dr. Walter H. Simmons of Jackson, for his service.

—Upheld an opinion of the Judicial Council that physicians should not maintain offices for private practice for care of outpatients in community, county, nonprofit, or church-affiliated hospitals, except for pathologists and radiologists or those in medical education, especially in the family practice training program. Exceptions were made in cases of private proprietary hospitals or to physician-owners when the medical staff approves the practice.

—Directed accolades to Speaker William E. Lotterhos of Jackson and Vice Speaker John B. Howell, Jr., of Canton for "fair, impartial, and efficient conduct of our business in the House of Delegates."

—Approved and commended the report and representation of AMA Delegates Howard A. Nelson of Greenwood and G. Swink Hicks of Natchez.

—Rescheduled annual sessions for 1971, 1972, and 1973 to avoid conflict with Mother's Day and municipal elections.

—Set the dates of the 106th Annual Session for May 6-9, 1974, at the Gulf Coast.

—Applauded the new building addition and asked members to visit their new facility at Jackson.

—Expressed satisfaction over the Professional Corporation Act sponsored successfully by the association but cautioned members who contemplate incorporation to consult tax advisers and legal counsel.

—Thanked the Council on Scientific Assembly for the outstanding scientific program and exhibits.

—Urged continued participation by all physicians in voluntary support of medical education through AMA-ERF.

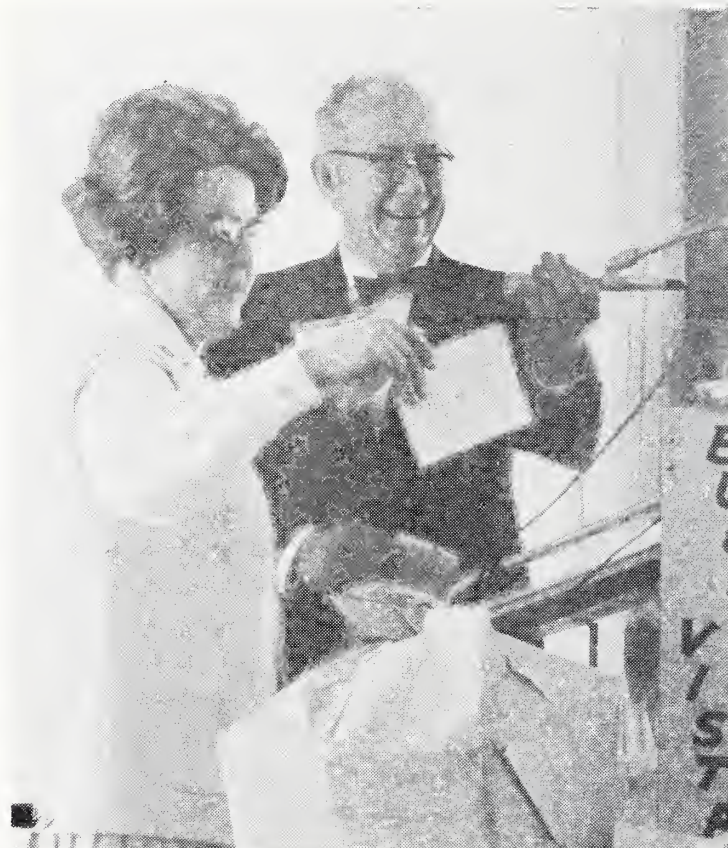
—Fixed as policy that any practitioner who holds himself out as capable of diagnosing and treating human disease meet the same statutory



JULIUS SCHMID
PHARMACEUTICALS
New York, N.Y. 10019



New officers for Mississippi Association of Pathologists are, from left, Drs. Roland F. Samson, secretary; George M. Sturgis, past president; Carl G. Evers, president; and William V. Hare, past secretary. Left, Dr. M. Beckett Howorth, Jr., reports to House as chairman of Reference Committee on Reports of Officers and Board of Trustees. Right, Vice Speaker John B. Howell, Jr., has able assistance of 1969-70 Auxiliary President Faye Lehmann in prize drawing.





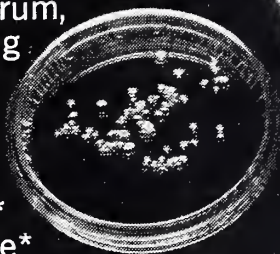
The Woman's Auxiliary elected a new slate of officers for 1970-71. Seated left to right, the ladies are Mesdames Curtis Caine, Jackson, president; T. E. Ross, III, Hattiesburg, president-elect; and Clarence H. Webb, Jr., Jackson, first vice-president. Standing are Mesdames William H. Preston, Jr., Booneville, second vice-president; H. H. McClanahan, Jr., Columbus, fourth vice-president; David Wilson, Jackson, treasurer; and Joe Herrington, Natchez, recording secretary. Right center, Dr. Brumby discusses new products with Charles Kirkland, Stuart Co. professional service representative. Lower right, President Royals exchanges greetings with Ben Evans, Jr., of William P. Poythress Co.



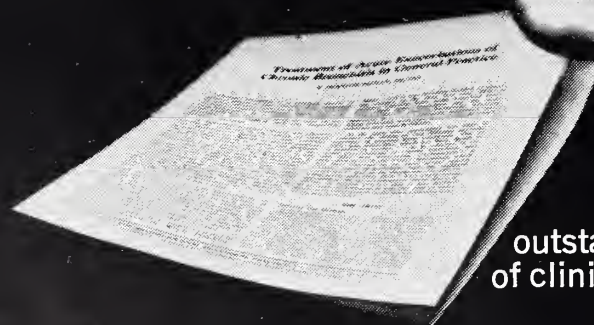
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H. influenzae*
M. pneumoniae (PPLO)*
N. gonorrhoeae*

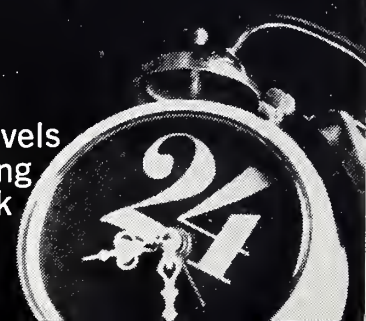


low incidence
of diarrhea



outstanding record
of clinical success

therapeutic blood levels
usually persisting
around-the-clock





Mississippi Ob-Gyn Society officers are, from left, Drs. George Ball, secretary-treasurer; William R. Raulston, president; William S. Cook, section chairman; and Warren C. Plauché, section secretary. Lower left, Drs. M. Beckett Howorth, Jr., and Benton M. Hilbun are chairman and secretary, respectively, of Section on Surgery. Lower right, Mrs. G. Prentiss Lee of Portland, Ore., AMA Auxiliary First Vice President, was featured speaker for ladies' meet. On left is Mrs. Curtis W. Caine, 1970-71 president, and right is Mrs. Louis C. Lehmann, 1969-70 president.



HEALTH SCIENCE LIBRARY

standards for licensure as doctors of medicine.

—Asked that tax incentives be given to physicians who practice in rural areas in the United States by necessary amendment of the Internal Revenue Code of 1954.

—Recognized the shortage of physicians and called on "the State of Mississippi to do those things necessary in support of the University of Mississippi School of Medicine to increase the size of classes of medical students to the end that the state may enjoy the benefits of larger graduating classes."

—Recommended location of a new training facility for the mentally retarded in or near Oxford, Mississippi.

—Protested the burdensome regulations and paperwork in Medicaid and asked the commission to clarify and simplify forms by the end of 1970, offering the services of the association in the task.

—Called for continuation of the emergency medical helicopter transportation demonstration project with bases and aircraft at Greenwood, Jackson, and Hattiesburg.

—Provided exemption from state association dues for members who are 70 years of age prior to the year of exemption and who have been active members for 10 consecutive years.

—Expanded the membership of the Council on Budget and Finance to five from the present three members effective in 1971 with all members to be elected by the House of Delegates.

The delegates were in session Monday, May 11, with reference committee meetings that afternoon. Final actions, including election of 1970-71 officers, Trustees, and council members, came on May 14, the concluding day.

Scientific Assembly Begins Work for '71

The 1971 Annual Session is set for May 3-6, with headquarters at the Buena Vista hotel and motel at Biloxi. The Scientific Assembly has already begun planning for the 103rd.

Acting by separate sections during the recent 102nd Annual Session, the seven components of the Scientific Assembly named new chairmen, and three sections elected new secretaries.

Under the By-Laws, a section chairman serves a term of only one year, but section secretaries are elected for three years. Each office carries an

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Indications: SYNTHROID (sodium levothyroxine) is specific ment therapy for diminished or absent thyroid function from primary or secondary atrophy of the gland, congenital surgery, excessive radiation, or antithyroid drugs. Indica SYNTHROID (sodium levothyroxine) **Tablets** include my hypothyroidism without myxedema, hypothyroidism in pre pediatric and geriatric hypothyroidism, hypopituitary hyp ism, simple (non-toxic) goiter, and reproductive disorders as with hypothyroidism. SYNTHROID (sodium levothyroxine) I is indicated in myxedematous coma and other thyroid dysf where rapid replacement of the hormone is required. Wha tient does not respond to oral therapy, SYNTHROID (sodi levothyroxine) injection may be administered intravenously to a question of poor absorption by either the oral or the intran route.

Precautions: As with other thyroid preparations, an ove may cause diarrhea or cramps, nervousness, tremors, tach vomiting and continued weight loss. These effects may be four or five days or may not become apparent for one to three Patients receiving the drug should be observed closely for thyrotoxicosis. If indications of overdosage appear, disc medication for 2-6 days, then resume at a lower dosage patients with diabetes mellitus, careful observations should be for changes in insulin or other antidiabetic drug dosage ments. If hypothyroidism is accompanied by adrenal insuffici Addison's Disease (chronic subcortical insufficiency), Simi Disease (panhypopituitarism) or Cushing's syndrome (hype alism), these dysfunctions must be corrected prior to and SYNTHROID (sodium levothyroxine) administration. TI should be administered with caution to patients with cardio disease; development of chest pains or other aggravations diovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarc

Side effects: The effects of SYNTHROID (sodium levoth therapy are slow in being manifested. Side effects, when occur, are secondary to increased rates of body metabolism ing, heart palpitations with or without pain, leg cramps, and loss. Diarrhea, vomiting, and nervousness have also been ob Myxedematous patients with heart disease have died from increases in dosage of thyroid drugs. Careful observation patient during the beginning of any thyroid therapy will a physician to any untoward effects.

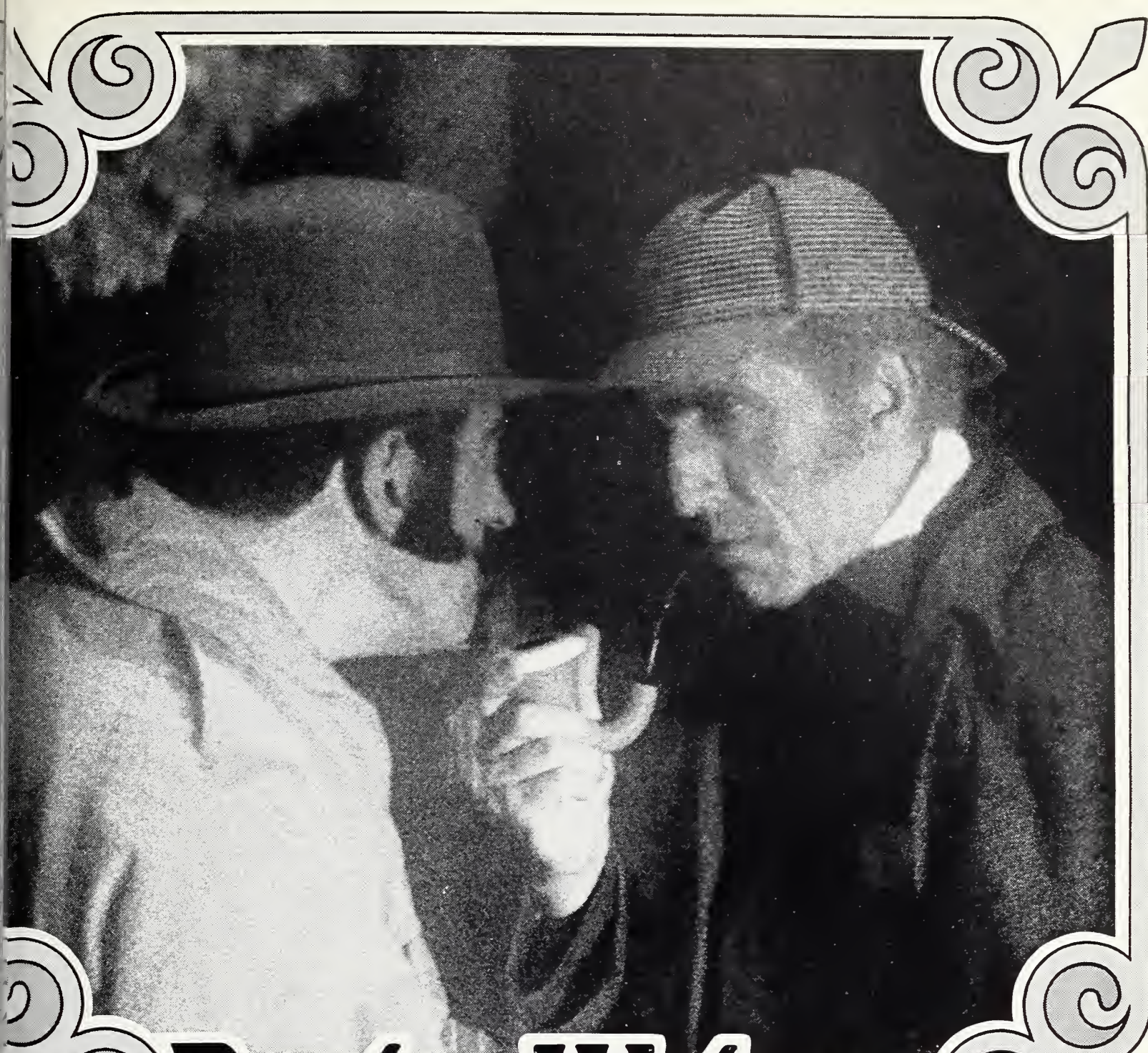
In most cases with side effects, a reduction in dosage follo a more gradual adjustment upward will result in a more a indication of the patient's dosage requirements without the ance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYN (sodium levothyroxine) TABLET is equivalent to approxima grain thyroid; U.S.P. Administer SYNTHROID tablets as a daily dose, preferably after breakfast. In hypothyroidism myxedema, the usual initial adult dose is 0.1 mg. daily, and increased by 0.1 mg. every 30 days until proper metabolic be attained. Clinical evaluation should be made monthly a measurements about every 90 days. Final maintenance dos usually range from 0.2-0.4 mg. daily. In adult myxedema, dose should be 0.025 mg. daily. The dose may be increased mg. after two weeks and to 0.1 mg. at the end of a second tw The daily dose may be further increased at two-month inte 0.1 mg. until the optimum maintenance dose is reached (0.1 daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.5 mg., scored and color-coded, in bottles of 100 and 50 tion: 500 mcg. lyophilized active ingredient and 10 mg. of M N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Injection, U.S.P., as a diluent.

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Doctor Watson exposes a double agent

on the Embankment. Two figures emerge into silhouette against a
d street lamp. The flare of a match reveals the profile of Sherlock
es. As he lights his calabash, his companion speaks:

ove, Holmes, that amazing intuition of yours has proved right
l. What we're looking for is a single entity. I thought we were
ng with several others—even twins. But now—I'd say we've
vered a double agent."

me more, Watson, and be quick about it!"

son withdraws a folded paper from inside his greatcoat, and
aloud from it):

key to the whole cypher is SYNTHROID (sodium levothy-
e)"...

h! Watson, not so loud! You'll alert our quarry."

son continues): "A single entity that serves two functions."

taster stroke, Watson."

ow along, Holmes. In the neighborhood of 95% of the circulat-
yroid hormone is levothyroxine— T_4 as you call it. T_4 is bound
roxine-binding proteins in the serum. It becomes available only
ally to tissue cells—as free thyroxine."

"Is that why there's such a smooth, predictable response, Watson?"

"Quite! With agent T_4 , SYNTHROID, the chances of a precipitous
rise in metabolic rate are lessened."

"But how does 'free' thyroxine fit into the picture?"

"Well, Holmes, you might call it the tissue thyroid hormone—because
'free' thyroxine (that is, thyroxine not bound to protein) is active at
the tissue level. It is gradually released from thyroxine-binding pro-
teins. Each daily dose of SYNTHROID is mostly bound to thyroid-
binding proteins, and slowly released as 'free' thyroxine—the form in
which it is metabolically active."

"Magnificent, Watson! So protein-bound thyroxine is the major form
of circulating thyroid hormone, and it is released as 'free' thyroxine.
And that's why SYNTHROID is able to simulate the normal process
so artfully. Q.E.D."

"Not so fast, Holmes. SYNTHROID works for the *physician*, too.
Because its dosage is more precisely controllable, and because re-
sponse is so smooth and predictable, the *doctor* gets fewer phone calls
in the wee hours from agitated patients. Both parties get more sleep!"

"Comforting, my dear doctor, to know that SYNTHROID, the
'single agent,' cleverly does the job of two."

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automatic seat and vote in the House of Delegates to assure proper representation of each scientific section.

Secretaries of the seven sections are on staggered terms so that annual elections are for two, two, and three in any three-year period.

Named to head the Section on EENT is Dr. Richard L. Blount of Jackson; while Dr. James K. Williams, Jr., of Pascagoula continues to serve as section secretary.

Heading the Section on General Practice is Dr. James O. Stephens of Magee. Dr. W. Johnson Witt of Jackson remains at his post as secretary.

The internists chose Dr. C. Ralph Daniel, Jr., of Jackson as chairman of the Section on Medicine. Dr. S. H. McDonnieal, Jr., of Jackson, enters his first year as section secretary.

Dr. William S. Cook of Jackson heads the Section on Obstetrics and Gynecology. Serving his second year as secretary is Dr. Warren Plauche of Biloxi.

Dr. John D. McEachin of Meridian is the new chairman of the Section on Pediatrics. New section secretary is Dr. John R. Jackson of Hattiesburg.

Dr. Hugh B. Cottrell of Jackson will chair the Section on Preventive Medicine. Dr. Frank M. Wiygul, Jr., of Jackson will continue as section secretary.

Advancing from secretary to chairman, Dr. M. Beckett Howorth, Jr., of Oxford heads the Section on Surgery. Named to the post of secretary for a three-year term is Dr. Benton M. Hilbun of Tupelo.

Dr. Raymond S. Martin, Jr., of Jackson, association secretary-treasurer, is constitutional chairman of the Council on Scientific Assembly.

Dr. Martin said, "The council will be meeting this summer to review preliminary plans for the 103rd Annual Session and to begin actively working on the program."

He said that the exhibit prospectus for technical exhibitors will be released this fall. Specialty societies are invited to submit plans for concurrent meetings and requests for assignment of rooms, including those for meal occasions, he added.

The president, Dr. Paul B. Brumby of Lexington, and the president-elect, Dr. Arthur E. Brown of Columbus, are *ex officio* members of the Council on Scientific Assembly under the By-Laws.

Gettysburg Commission Is Headed by M.D.

A Mississippi physician heads the commission which is directing a project to place a memorial in the Gettysburg National Park honoring state Confederate dead. Dr. M. Ney Williams, Jackson, anesthesiologist, chairs the eight-member group appointed by the Governor.



Members of the Gettysburg Commission appointed by Gov. John Bell Williams recently conferred with noted sculptor Donald DeLue of Leonardo, N. Y., far left, who has been commissioned to execute the Mississippi Memorial. Committee members are, from second left, Ed Sturdivant of Jackson, Dr. M. Ney Williams of Jackson, and Associate Supreme Court Justice Tom P. Brady of Brookhaven.

Dr. Williams said that the noted sculptor, Donald DeLue of Leonardo, N. Y., has been commissioned to execute the Mississippi memorial in bronze. It will stand on a frequently visited site of the Pennsylvania battlefield near the road leading to the Dwight Eisenhower farm.

Visiting Jackson recently to meet with the commission, Mr. DeLue displayed a working model of the memorial. It is a statue of two soldiers on the battlefield "devoted to country, honor, and integrity of the men who fought and died at Gettysburg."

Mr. DeLue said that "it is not to be militaristic but to pay honor and tribute to the men themselves."

The finished memorial, destined to stand adjacent to the Louisiana monument, will be of heroic proportion, standing 17 feet in height. Two years will be required to complete the work, Mr. DeLue said.

Funds for the memorial were appropriated by the 1970 Regular Session of the Legislature, Dr.

Williams said. Mr. DeLue has executed a number of important memorials, including the Louisiana monument and one to the Confederate army and navy at Gettysburg. He has among his credits the statue of a Green Beret at Ft. Bragg, N. C.

Dr. Williams' colleagues on the memorial commission are Supreme Court Justice Tom P. Brady of Brookhaven, Ed Sturdivant of Jackson, Tom W. Crigler of Macon, Gary Evans of Greenwood, Clarence Pierce of Vaiden, noted Civil War historian Albert Andrews of Jackson, and Rep. Stone Barefield of Hattiesburg.

Governor Names Three to Board of Health

Gov. John Bell Williams has named two physicians as new members of the Mississippi State Board of Health and reappointed a member for another six year term. The appointments are subject to confirmation by the state senate.

Dr. G. Lacey Biles of Sumner was appointed to succeed Dr. Julian C. Bramlett of Oxford, representing Public Health District 2.

Dr. S. Lamar Bailey of Kosciusko is the new member from Public Health District 4, succeeding Dr. Joseph Guyton, formerly of Pontotoc, who has relocated in Memphis for the practice of psychiatry.

Named to succeed himself for a six-year term is Dr. Lamar Arrington of Meridian, a 12-year veteran member.

Nominees for Board of Health posts are named by the state medical association under Mississippi law. The governor made selections from among three nominees for each post. These were named by the House of Delegates at the 1969 annual session. All three terms run from Jan. 1, 1970, through Dec. 31, 1975.

Nominees for the District 2 post were Dr. Biles, Dr. Bramlett, and Dr. John R. Lovelace of Batesville. District 4 nominees were Dr. Bailey, Dr. Thomas N. Braddock, Jr., of West Point, and Dr. Lester D. Webb of Calhoun City.

Considered for the District 5 were Drs. Arrington, John R. Laird of Union, and Omar Simmons of Newton.

Other medical members of the State Board of Health are Drs. Dewitt Hamrick of Corinth, John G. Egger of Drew, Joseph G. McKinnon of Hattiesburg, G. Swink Hicks of Natchez, and H. C. Ricks, Sr., of Jackson.

Dr. Felix K. West of Clarksdale is the dental

member. Dr. Hugh B. Cottrell of Jackson is state health officer and member-at-large selected by the Board. Dr. Frank J. Morgan, Jr., of Jackson is assistant state health officer. There is also an optometric member of the Board.

At the recent 102nd Annual Session, no nominees for the Board of Health were named, since no terms expire in 1970.

Board of Trustees Elect New Officers

The nine-member governing body of the association, the Board of Trustees, has renamed Dr. Mal S. Riddell, Jr., of Winona, District 4 Trustee, as its 1970-71 chairman. Dr. J. T. Davis of Corinth, District 3, was re-elected vice chairman.

Dr. William O. Barnett of Jackson, District 5, is the Board's secretary. He, the chairman, and vice chairman make up the executive committee.

Dr. Lyne S. Gamble of Greenville was elected Trustee from District 1. Re-elected to Trustee posts were Drs. James O. Gilmore of Oxford, District 2, and J. T. Davis of Corinth, District 3.

Continuing to serve current terms are Drs. James T. Thompson of Moss Point, District 9, Guy T. Vise of Meridian, District 6, W. E. Moak of Richton, District 7, and Everett Crawford of Tylertown, District 8.

Seven general officers meet with the Board regularly but without the right to vote. They are the president, president-elect, secretary-treasurer, speaker, vice speaker, and AMA delegates.

Florida Presents OB-GYN Seminar

The University of Florida college of Medicine at Gainesville will present a Seminar in Obstetrics and Gynecology Nov. 19-20, 1970.

Guest speakers will be Dr. Lawrence L. Hester, professor and chairman, department of obstetrics and gynecology, Medical College of South Carolina; and Dr. William Normal Thornton, Jr., professor and chairman, department of obstetrics and gynecology, University of Virginia School of Medicine.

For further information, contact: Division of Postgraduate Education, J. Hillis Miller Health Center, Box 758, College of Medicine, Gainesville, Fla. 32601.

Dr. Barnett Named Physician of the Year

Dr. William O. Barnett, professor of surgery, University of Mississippi Medical Center, was selected to receive the Mississippi Association of Medical Assistant's award of "Physician of the Year." The announcement was made at the organization's annual state convention on the Gulf Coast.



Dr. Barnett

In making the announcement, Mrs. Mary Adeline Pace, President, stated, "Education is the primary purpose of our organization on local, state, and national levels, and it is the feeling of our membership that MAMA's educational programs throughout the state

have been greatly enhanced through Dr. Barnett's interest, advice and encouragement during 1969-70." Dr. Barnett was presented an engraved plaque.

A native Mississippian, Dr. Barnett has been active in medical education since joining the faculty of the University of Mississippi School of Medicine in 1955.

At the present time he serves the Mississippi State Medical Association as chairman of the Council on Medical Education, Trustee from District Five, and secretary of the Board of Trustees, is president of Central Medical Society and an associate councilor of Southern Medical Association.

Hinds County Children Immunized Against Rubella

Thousands of Hinds county youngsters made a "Children's Crusade" to health clinics Sunday, May 31, for immunity against Rubella, or German measles.

Dr. H. B. Cottrell, executive officer, State Board of Health, said the "Stop Rubella Sunday" was another in a series of county-wide immunization programs by the state agency.

Dr. Durward L. Blakey, director of the Division of Preventable Disease Control, State Board of Health, said over 80,000 doses of Rubella vaccine have been given since the agency began the program in October of 1969.

He said at least 30,000 children got shots in Hinds county on May 31 with the number possibly going as high as 50,000, making it one of the largest single-day programs in the Southeast.

Paul Turner, of the Vaccination Assistance Program, State Board of Health, and supervisor of the statewide immunization program, said programs already have been carried out in 44 counties, and another 15 counties will be reached "within the next six weeks."

Dr. Eric McVey, director of the Hinds County Health Department, said 25 clinics were set up for "Stop Rubella Sunday" on May 31.

"The clinics were located in places most easily accessible to the people," said Dr. McVey. "The county health department building was open that day as a clinic and as the communications headquarters."

He added: "This is a community project backed by medical organizations, and it is one of the most important things we can do in a program of modern preventive medicine. We had about 18 sites inside Jackson and about seven more outside Jackson."

Dr. McVey said the Rubella vaccine was offered to all children from the age of one year through the age of eleven.

The State Board of Health paid one-third of the cost of the vaccine, and Hinds county and the City of Jackson agreed to share another third of the cost. The other third came from civic and service organizations in the county.

Turner said some of the cost was defrayed through contributions made by individuals. He said cost of the vaccine averages about a dollar per dose. He said "it appears at this time that a dose would give lifetime immunity."

The program in Hinds county is part of a statewide effort by the State Board of Health to immunize children from one through eleven, with first priority on those five through seven. Turner said that the program in Hinds county reached the wider age span (one through eleven) because of the financial support pledged by the city and county governments.

Each clinic was manned by a physician, two technicians, two nurses, six clerks and a site coordinator. Policemen and county deputies were on duty at each clinic to direct traffic and to keep the lines orderly.

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Index to Advertisers

Arch Laboratories	363	Lederle Laboratories	4, 6
Breon Laboratories	8	Eli Lilly and Company	front cover, 18
Bristol Laboratories	16, 17	National Drug Company	second cover, 360A, 360B
Burroughs-Wellcome	352B	Chas. Pfizer and Company, Inc.	354, 355, 356
Campbell Soup Company	328A	Wm. P. Poythress	340B, 352A
Dow Chemical Company	340A	A. H. Robins Company	328D
Flint Laboratories	358, 359	Roche Laboratories	15, 342, fourth cover
Highland Hospital	10	Schering Corporation	14A, 14B, 14C, 14D
Hill Crest Hospital	14	Julius Schmid, Inc.	350, 351
Hoechst Pharmaceuticals	12	G. D. Searle	328B, 328C
Hynson, Westcott and Dunning, Inc.	3	Smith, Kline and French	11
Kay Surgical	363	Thomas Yates and Company	third cover

IN CONCLUSION

Support of emergency medical helicopter service by state medical association at annual session fits national pattern of growing importance of whirlybirds in rapid patient movement. Mississippi's CARE-SOM project is part of 300 helicopters now in service as air ambulances in 23 states. Many hospitals have FAA-licensed heliports on grounds or roofs, and some few have their own aircraft. State's three helicopter bases serve 38 counties.

Fluoridation of water supplies marked 25th anniversary recently with 88 million Americans in 4,800 communities having access to cavity-fighting drinking water. First U.S. community to fluoridate water was Grand Rapids, Mich., in 1945. Success of fluoridation has been outstanding and costs are minimal. American Dental Association says it costs 10 cents per person per year or only an additional \$1 million to treat remaining unfluoridated water supplies.

The youngsters are the accident casualties at work. So says the Health Insurance Institute. A recent five-year study showed that highest accident rate in office and factory is for those under age 20. Rate drops in age bracket 30-59 and tends to rise slightly for 60-64 group. Falls are the greatest single source of injury, and while sex is no factor in occurrence, men sustain more disabling injuries than women, probably attributable to heavier work.

Pfizer Laboratories has marketed - with FDA approval - a new drug for inoperable testicular cancer, an antibiotic tradenamed Mithracin. Derived from a soil organism of the Streptomyces genus, the drug is a potent cytotoxic substance which should be used only in hospitals. In 305 patients, about 33 per cent had tumor masses to disappear. Pfizer gives drug without charge when used for treatment of indigent patients.

State legislatures are frugal with appropriations for teaching hospitals operated in conjunction with tax-supported medical schools. Association of American Medical Colleges found that 34 teaching hospitals received only \$169 million in state funds last year on total operating budgets of \$560 million. Only one state provided more than \$10 million for a hospital. Highest budget for an institution was \$39 million, and lowest was \$5 million.

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CONTENTS

ORIGINAL PAPER

Inherited Human Cancer 365 JOHN F. JACKSON, M.D.

SPECIAL ARTICLES

- Radiologic Seminar XCVII
Ureteropelvic Junction
Obstruction 372 NANCY W. BURROW, M.D.
- Medicine for the 70's:
Decade of Decision 374 JAMES L. ROYALS, M.D.
- Constitution and By-Laws
of the Mississippi State
Medical Association 378 Annual Publication

EDITORIALS

- Medicare's Part C:
Danger, Dichotomy,
Anathema 387 Now, It's HMO's
- State Legislation Is
Everybody's Crisis 389 Solons and Medicine
- CCS Goes to State Board
of Health 390 A Logical Move
- Hellzapoppin' on Drug
Abuse Bills 392 Washington
Tragedicomedies
- Aspirin on Rx? Some
Say Yes! 394 30 Tons a Day!
- Homicide Increases in the
United States 394 The Ultimate Violence

THIS MONTH

- The President Speaking 386 'The Making of an M.D.'
- Medical Organization 401 Ole Miss Medical Alumni
House Dedicated

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Illinois Plans Postgraduate Course

The Department of Otolaryngology of the University of Illinois at the Medical Center will conduct a postgraduate course in laryngology and bronchoesophagology Nov. 9-20, 1970.

The course is limited to fifteen physicians and will be under the direction of Dr. Paul H. Holinger.

Course headquarters will be at the Eye and Ear Infirmary of the University of Illinois Hospital, 1855 West Taylor Street, Chicago. Registrants will attend animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, didactic lectures and motion pictures. Visits to a number of Chicago hospitals are also planned.

For further information, write to the Department of Otolaryngology, Abraham Lincoln School of Medicine of the College of Medicine, University of Illinois at the Medical Center, P. O. Box 6998, Chicago, Ill. 60680.

Birth Defects Symposium Scheduled

"Disorders of Glucose Metabolism in Children," the second annual Birth Defects Symposium, will be Oct. 30-31, 1970, at the University of Florida College of Medicine, Gainesville, Fla.

Sponsored by the university's Institutional Division of Endocrinology and Metabolism and the National Foundation-March of Dimes Birth Defects Center, the symposium will feature discussions of diabetes mellitus, hypoglycemia of childhood and energy metabolism, as well as case presentations.

Guest faculty are Dr. Allan Drash, associate professor of pediatrics, University of Pittsburgh, and Dr. Donough O'Brien, professor of pediatrics, University of Colorado. Dr. Arlan L. Rosenbloom, assistant professor of pediatrics and director of UF's Birth Defects Center, is program director. Meetings will be held in the second floor auditorium of the College of Medicine.

Registration fees will be waived for interns and residents. For additional information and schedule of fees, please write Mrs. Betty L. Howard, Division of Postgraduate Education, J. Hillis Miller Health Center, Gainesville, Fla. 32601.

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NEWSLETTER

July 1970

Dear Doctor:

All and final implementation of Mississippi's Medicaid program is slated for July 1 as plan observes six months milestone. Although Medicaid Commission has yet to release performance figures, payment amounts, and claims volume, estimates are that providers' billing velocity will more than double with addition of prescription drugs. Remaining minor services, hitherto deferred, will also be offered.

Vendor drug program carries surprisingly small list of mandatory generic prescription items. A vast majority of the state's 704 licensed pharmacies are expected to participate in program which will reimburse them costs of Rx acquisition plus \$1.50 professional fee.

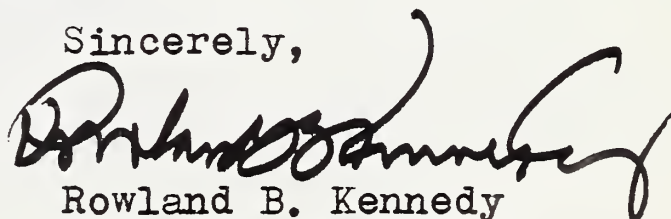
Examinees of the American Board of Family Practice turned in excellent showing on first try for certification. Of 2,078 physicians taking two-day exam in 36 centers, about 82 per cent became diplomates. Among those graduating from medical school in last 20 years, almost 96 per cent passed. New specialty board is unique in that it has no grandfather clause. Charter diplomates constitute only about 3 per cent of nation's family physicians.

Mississippi's institutions of higher learning must establish a baccalaureate school of social work. So says Dr. Dorothy N. Moore, director of the Interagency Commission on Mental Illness and Rehabilitation. Dr. Moore said present baccalaureate program needs master degree backup to assure full span of services offered by psychiatrists, psychologists, and nurses now trained in state.

The British Medical Association has urged English physicians to adopt a policy of "noncooperation" with National Health Service. The sharp break with socialized medicine came when NHS gave senior physicians only 15 per cent wage boost after 30 per cent was asked. Junior physicians and GP's received higher increase but specialists were snubbed in wage dispute.

Turkey, prime source of illicit narcotics, has offered to halt production of opium if U.S. physicians stop using opium derivatives. The U.S. has replied that any proposal to stop use of morphine is move to deny patients the most effective drug for relief of pain. AMA also asserted that even if Turkey clamped down on poppy-farming, traffic in heroin would probably continue as usual.

Sincerely,



Rowland B. Kennedy
Executive Secretary

SMA Plans November Meeting

The 64th Annual Meeting of the Southern Medical Association, scheduled for Nov. 16-19 in Dallas, is expected to be the largest and most complete in the association's history. The expansive four day meeting, with each of 21 specialty sections presenting its own program, will focus upon new areas of medicine and scientific research. Outstanding specialists and medical leaders from many sections of the country will gather to exchange knowledge, with over 300 speakers participating in the interdisciplinary programs.

Dr. L. S. Thompson, Jr., general chairman, heads the impressive list of Dallas members serving on the various committees which are charged with the immense responsibility of making numerous arrangements.

Officers of SMA include Drs. J. Leonard Goldner (Durham, N. C.), president; Albert C. Esposito (Huntington, W. Va.), president-elect; J. Hoyle Carlock (Ardmore, Okla.), first vice-president; and Linton H. Bishop, Jr. (Atlanta, Ga.), second vice-president. Encompassing 16 southern states and the District of Columbia,

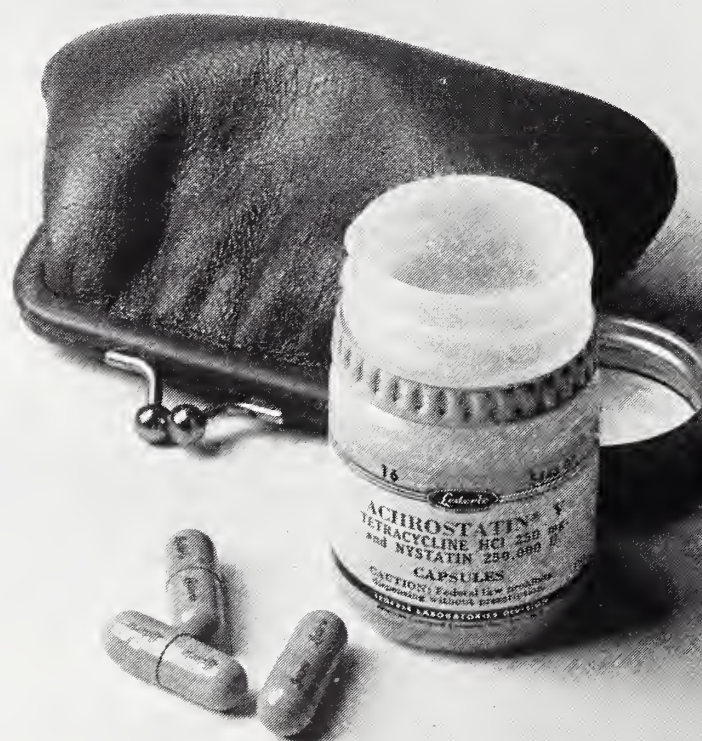
Southern Medical is America's second largest general medical organization, contributing the country's largest general medical publication, the *Southern Medical Journal*.

The Dallas Memorial Auditorium will house the majority of meeting activities—scientific sessions, business meetings, and the vast scientific and technical exhibits. A number of panel discussions and symposia of significant importance and general interest will be presented. Several distinguished scientific groups to meet conjointly with SMA are: The American College of Chest Physicians, Southern Chapter; the Flying Physicians Association; the Radiologic Society of North America; and Southern Gynecological and Obstetrical Society.

Again this year, the association will play host to selected junior and senior medical students from 34 medical schools throughout the SMA sphere. This unique opportunity is designed to impart to the students early in their careers the value of continuing education.

The meeting will be open to all doctors of medicine who are members of their county or state medical societies, as well as to residents, interns, junior and senior medical students, nurses and medical technicians. There will be no registration fee.

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DATELINE

TV Guide Lauds CBS New York - TV Guide, commercialized mouthpiece
cast at Medicine for major networks, lists the slanted CBS pro-
grams blasting medicine as being among the best
specials of the 1969-70 year. Consistent with this selection,
the magazine also picked the anti-South "Andersonville Trial" and
program on Black Panthers among the best of the season. The pub-
lication has an almost unblemished record of defending the networks'
position on news editorializing and "message" programming.

College Fees Will Washington - Surveys released by U. S. Chamber
go up Next Session of Commerce show that colleges and universities
will increase tuition fees substantially for the
1970-71 session. Ivy League schools top list with \$4,000 price tag
for tuition and room and board. Median cost of tuition only at pri-
vate institutions will run \$2,500 and about \$1,200 for in-state
students at tax-supported schools. With medical schools equally
hard pressed, cost of M.D. degree continues upward price spiral.

Syphilis Incidence Atlanta - The U. S. Public Health Service Com-
up in 1970 municable Disease Center reports that syphilis
shows a marked increase during the first four
months of 1970. Incidence of the disease increased as much as 50
per cent in some areas of the nation, while the national rate was
up over 10 per cent. Worst metropolitan area is New York City which
has a 35 per cent increase in syphilis over 1969. The data also
disclose that incidence increase is notable among teenagers.

Justice, Congress, Washington - An intercabinet squabble over con-
HEW Hassle on Drugs trol of drugs has surfaced during committee hear-
ings on Capitol Hill on new Drug Abuse Control
legislation. Hearings are bogged down as Justice Department, now
head of Bureau of Narcotics and Dangerous Drugs, wants more control,
including licensure of drug manufacture. HEW takes position that it
is medically-oriented and best suited for job. Justice would also
make physicians keep records of all "dangerous" drugs dispensed.

HEW Supports New Chicago - Spokesmen for AMA Committee on Al-
Alcohol Institute coholism and Drug Dependence support legislation
to create a new National Institute for Prevention
and Control of Alcohol Abuse and Alcoholism in the NIH complex. Bill
would also recognize in federal statute that alcoholism is a disease
which can and should be treated. Another provision meeting AMA ap-
proval is that treatment and control programs should be community-
based with federal grants for construction and staffing.

New Book Discusses Disadvantaged Children

"A society genuinely concerned with educating socially disadvantaged children cannot restrict itself merely to improving and expanding educational facilities . . . it must concern itself with the full range of factors contributing to educational failure, among which the health of the child is of primary importance," says Dr. Herbert G. Birch, New York pediatrician and psychologist.

He analyzes in depth this hitherto largely ignored aspect of poverty in his new book, *Disadvantaged Children: Health, Nutrition, and School Failure*, written in collaboration with Joan Dye Gussow. This book offers the first full-scale analysis of the effects of health and nutritional deprivations on poor children.

Children suffer malnutrition before birth because their mothers are poorly fed and poorly developed physically, receive inadequate medical care, and have children too often. After birth these children continue to suffer because they must live under many of the same conditions which so severely affected their mothers throughout their lives.

Doctors have long known that malnutrition causes disease and seriously retards physical growth. A series of recent studies strongly suggest that malnourished children are also retarded in their mental development. The available data, new and old, on malnutrition, morbidity, and medical care among children of poor families in this country indicates that "the quality of their lives puts these children at risk as learners either by permanently impairing their capacity to learn or by interfering with the orderly acquisition of knowledge."

From birth to one year old, the human brain goes from 25 per cent to 70 per cent of its adult weight; by age 4 it is almost completed structurally. Therefore, the younger the child, the more significantly starvation affects his brain. Even relatively minor deprivation before birth and during the early years may have permanent effects far in excess of severe restrictions later in life.

Malnourished children are apathetic and irritable, and they lose the child's normal curiosity and desire for exploration. After being properly fed for a while, their normal responsiveness is regained. But, the duration of the period of undernourishment affects subsequent mental development.

LEONARD WRIGHT SANATORIUM

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LEONARD D. WRIGHT, SR., B.S., M.D., PSYCHIATRY

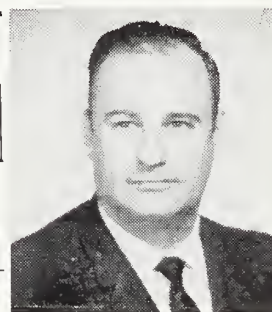
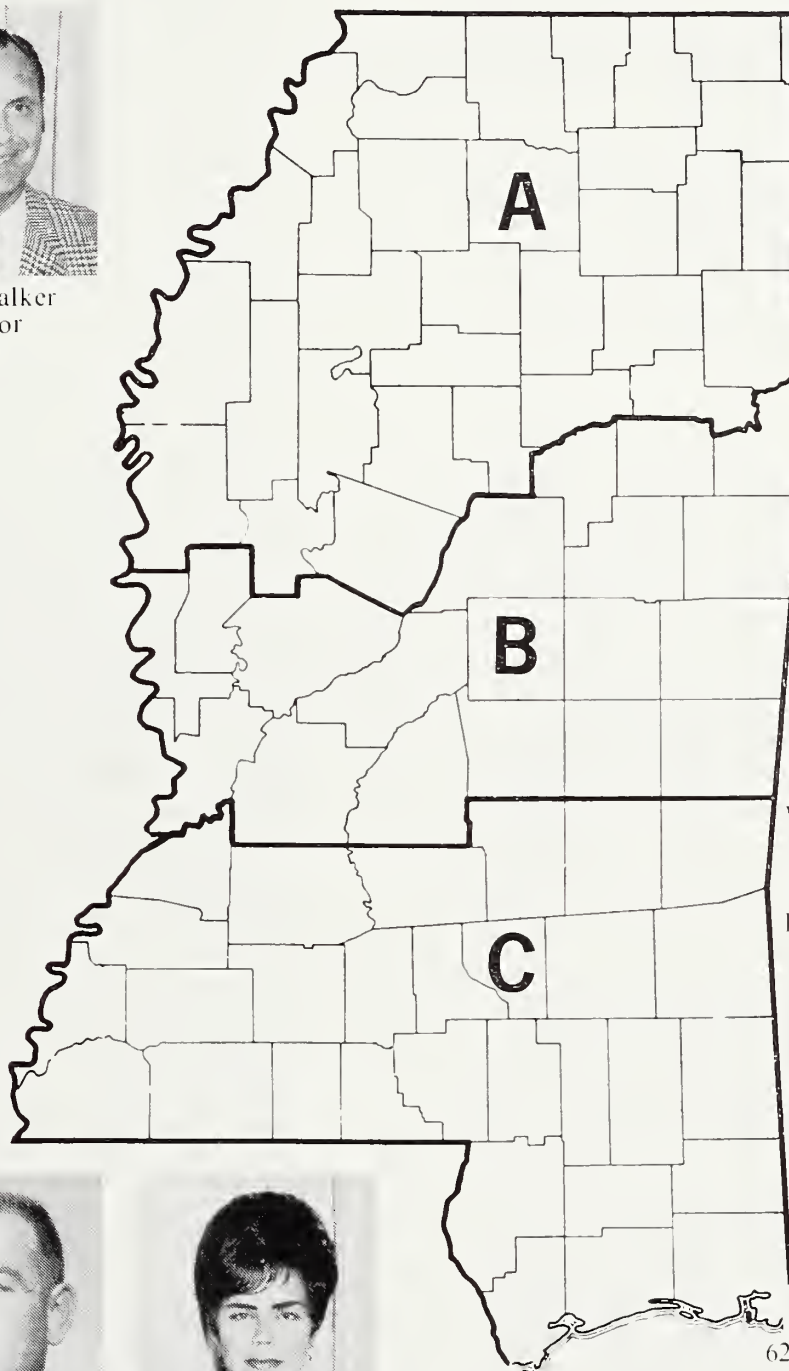
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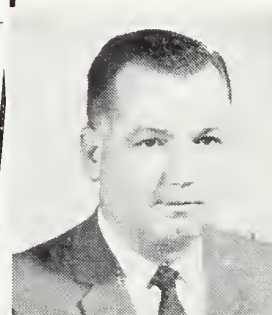
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NHLI Plans Sudden Cardiac Death Studies

The National Heart and Lung Institute, through its Myocardial Infarction Program, has awarded the first of a series of contracts for a program of research on sudden cardiac death. Sudden cardiac death, or death before hospitalization, accounts for about one-half of the almost 600,000 annual deaths from arteriosclerotic heart disease. While an improvement in the early availability of medical care will somewhat reduce this death toll, the large number of very sudden and very early deaths necessitates a better understanding of the acute disease process and the development of new modes of therapy.

The contractors and their awards for the first year are: the University of Miami, Miami, Fla. (\$284,896), Johns Hopkins University, Baltimore, Md. (\$157,000), Mount Zion Hospital and Medical Center, San Francisco, Cal. (\$68,500), and Emory University, Atlanta, Ga. (\$14,575). Several additional contracts will be announced in the near future.

These contracts are designed to: identify "trigger" factors that convert coronary atherosclerosis, the underlying disease process which may have been quietly present for many years, into a full-blown attack; identify premonitory signs and symptoms that may warn the patient or his physician of an impending attack so that measures can be initiated to abort the threatened episode or, failing that, hospitalize the patient before it occurs; identify factors that characterize the person at high risk of sudden, unexpected death. Epidemiological studies have quantified many of the factors which increase susceptibility to coronary heart disease—for example, high blood pressure, elevated blood lipids, cigarette smoking, obesity, electrocardiographic abnormalities, and sedentary habits. It may be possible to refine this "coronary profile" and to recognize other factors to identify prime candidates for rapidly lethal heart attacks.

The contracts are also designed to identify the physiological mechanisms responsible for acute heart attack and sudden death and to correlate them with anatomical and pathological changes; and to determine practical methods of treatment for the very early stages of a heart attack.

A major facet of the contracts which have been awarded is the collaborative study of correlations between autopsy findings and antecedent events in sudden cardiac death victims. The four contracts all provide for a common core of autopsy and interview data.

Brief Summary of Prescribing Information—9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. **Use in Pregnancy:** Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. **Reserpine:** Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. **Protoveratrine A:** Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

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ORIGINAL PAPERS

Inherited Human Cancer

JOHN F. JACKSON, M.D.

Jackson, Mississippi

ANY DISCUSSION of the genetic aspects of human cancer should include tumors in general rather than just malignant tumors, since some benign inherited tumors have rather definite relationships to the development of malignancy. The genetics of tumors involves two broad areas. One aspect is cytogenetics, which includes those things that can be examined with the microscope, such as chromosome analysis and buccal smears from which the sex chromosome patterns can be inferred. The other aspect is Mendelian inheritance, in which there are defects of specific genes that lie at some particular point (locus) on a specific chromosome. Gene defects can not be seen using the microscope, but their presence can be investigated by doing family studies (pedigrees) to determine inheritance patterns.

Mendelian genetics has three rather simple patterns of inheritance: autosomal dominant, autosomal recessive, and X-linked (or sex-linked). Autosomal refers to the fact that the gene lies on a chromosome other than a sex chromosome. In man there are a total of 46 chromosomes with 22 pairs of autosomes and two sex chromosomes in all somatic cells. In the female, the sex chromosomes

consist of two X chromosomes, and in the male there is one X chromosome and one Y chromosome.

While some inherited tumors are malignant at the time they first appear, other inherited disorders produce benign tumors which later may become malignant. The author includes both types in his discussion. He considers in depth the areas of cytogenetics and Mendelian inheritance.

In autosomal dominant gene transmission, anyone who inherits the abnormal gene is affected. He transmits this gene to 50 per cent of his children on the average because of the fact that he must give them one or the other of his two chromosomes of each pair. If the abnormal gene is transmitted, then the offspring gets the disorder. If the normal gene is transmitted, the child does not get the disorder, assuming that the spouse is a normal individual and does not carry the same gene. Since most inherited tumors are relatively uncommon, usually only one spouse has the disorder (Figure 1).

Neurofibromatosis is inherited in an autosomal dominant fashion. In this disorder, there are be-

From the Departments of Preventive Medicine and Medicine, University of Mississippi School of Medicine. Presented December 3, 1969, in the Clinical Cancer Program, Wednesday Cancer Conference Series.

nign tumors protruding from the surface of the skin. There may be literally hundreds covering an individual or there may be only one or two. In about 5 to 10 per cent of affected individuals, a benign neurofibroma will be transformed ultimately into a sarcoma. Peutz-Jeghers syndrome is also inherited in simple autosomal dominant fashion. This disorder has associated melanin-pigmented spots about the lips with benign polyps of the intestine. This disorder does not appear to have any propensity to malignant transformation. Hyperkeratosis palmaris and plantaris, on the other hand, has a rather high incidence of associated esophageal carcinoma.

Familial polyposis of the colon is also inherited as a simple autosomal dominant, but carries a much more grim prognosis. In familial polyposis there are literally myriads of small polyps scattered throughout the mucosa of the entire colon. If the colon is not removed, most patients with this disorder will have malignant transformation of one or more polyps by the age of 40. Thus here is illustrated an array of benign tumors inherited in simple autosomal dominant fashion, but with great variation in predisposition to malignant transformation.

OTHER DISEASES

There are other diseases such as retinoblastoma, usually inherited as an autosomal dominant, though there are sporadic cases which are not inherited. There is also Gardner's Syndrome in which there are polyps of the colon, osteomas, fibromas, and epidermal cysts. In polyendocrine adenomatosis there may be tumors of the pituitary, of the adrenal cortex, occasionally of the thyroid and frequently of the parathyroid.

AUTOSOMAL DOMINANT GENE TRANSMISSION

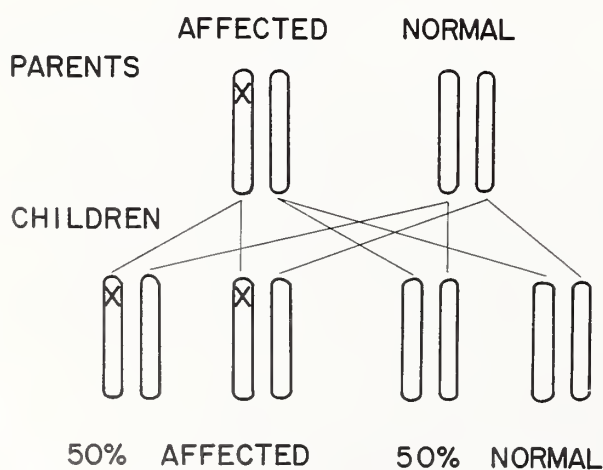


Figure 1

Peptic ulcer is frequently associated, and the Zollinger-Ellison syndrome of peptic ulcer associated with gastrin-secreting pancreatic tumor may be one facet of polyendocrine adenomatosis. In addition, there are hereditary multiple exostoses, multiple nevoid basal cell carcinoma, medullary thyroid carcinoma with amyloid, hereditary adenocarcinomatosis of the colon and uterus, and pheochromocytoma as other examples of tumors inherited in autosomal dominant fashion.

PROBABLE TRANSMISSION

Once any of these diseases appears in an individual, then the expectation is for him to transmit the disorder to 50 per cent of his children. In small sibships, there are not always exactly 50 per cent affected, just as one can flip a coin and have heads appear several times in succession. Similar skewed distribution may occur with dominant disease in one individual family, yet the statistical expectancy in large numbers at risk is for 50 per cent of the children to be similarly affected.

The next Mendelian inheritance pattern for discussion is sex-linked recessive gene transmission. By sex-linked is meant that the gene is located on an X chromosome, of which the female has two and the male has one. The reason that genes on the X chromosome are inherited in a different pattern is because the small Y chromosome in males leaves most of the genes on the X chromosome unpaired, whereas, the normal female has two completely-paired X chromosomes. Therefore, if an abnormal gene is present on that part of the X chromosome that is unpaired by the Y chromosome, then all of the males carrying this gene will be affected. If the abnormal gene is on one of the X chromosomes in the female and paired by a normal X chromosome, the disorder will not be manifested.

RESULTANT PATTERN

The resultant pattern is that the affected male transmits his abnormal gene to all of his daughters who then are carriers. They are not affected by this disorder because they have a normal gene on their other X chromosome. The affected father does not transmit the disorder to any of his sons because in order for them to be sons, they have to get his Y chromosome; otherwise they would have been daughters if they had received his X chromosome. In the next generation, a female carrier married to a normal male has 50 per cent carrier daughters, and 50 per cent normal who can not transmit the gene to the next

SEX-LINKED RECESSIVE GENE TRANSMISSION

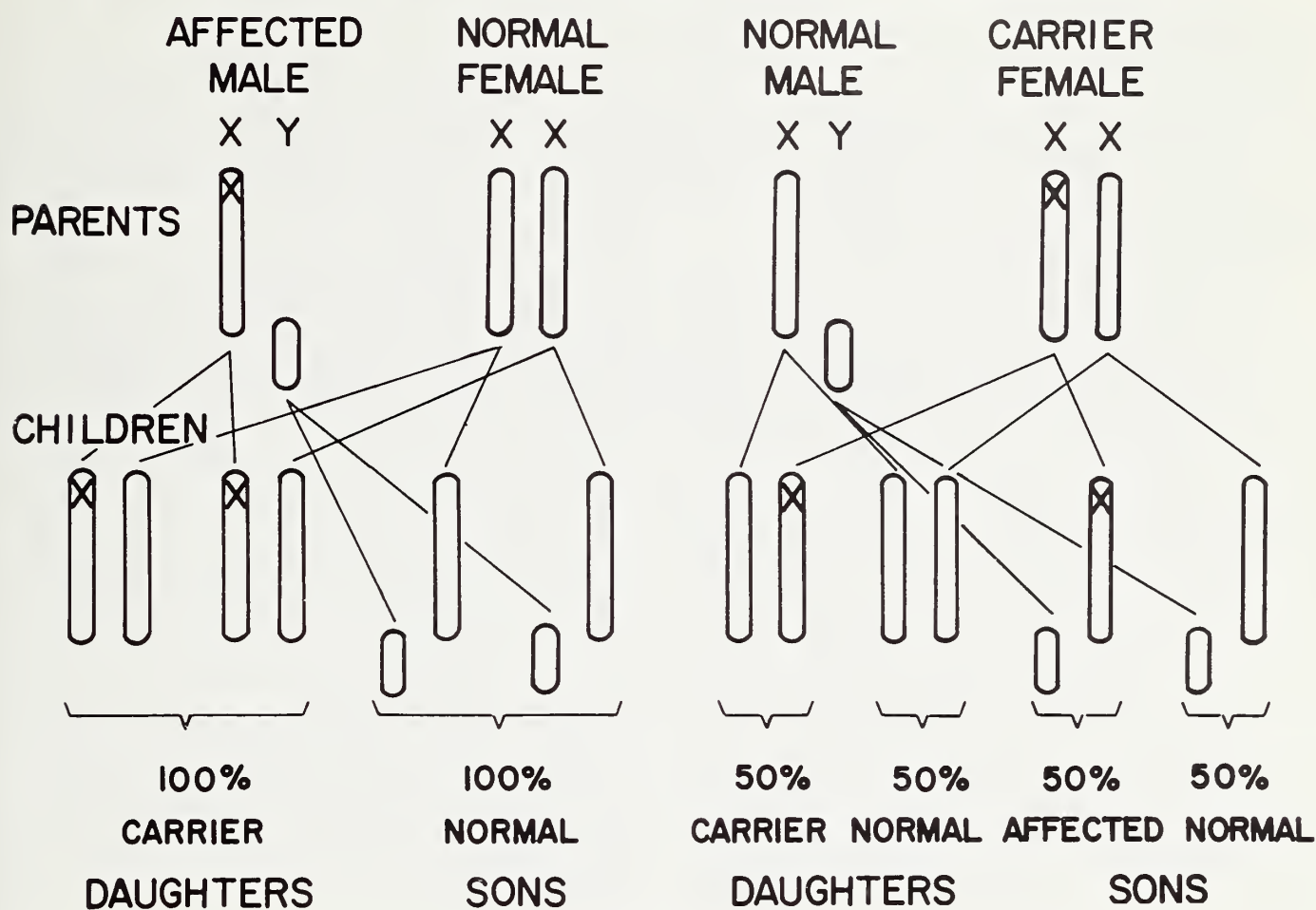


Figure 2

generation. Fifty per cent of the female carrier's sons will be affected and 50 per cent will be normal. Thus the pattern of transmission in a pedigree is that an affected grandfather has affected grandsons, and that there are only males affected (Figure 2).

RARE TRANSMISSIONS

Since most of these disorders are rare, it is unusual for a carrier female to marry an affected male. In such a case, affected females with abnormal genes on both X chromosomes could result. This is actually an over-simplification, since some females with only one abnormal X-linked gene may be more or less affected. This is due to the random inactivation of one of the X chromosomes to form the sex-chromatin body occurring as a normal event in all females, according to the Lyon hypothesis. Most female carriers are unaffected. Ichthyosis vulgaris is X-linked in transmission. There is some keratin build-up which is similar to that in hyperkeratosis palmaris and plantaris, but there is no increased incidence of malignancy in this disorder. Agammaglobulinemia of the Bruton type, in which there is failure to develop gammaglobulins, is inherited in

X-linked fashion, and there is a high incidence of associated leukemia.

The third and last pattern of Mendelian inheritance is that of autosomal recessive gene transmission. The gene is on an autosome, a non-sex chromosome. It is recessive, in that an individual who carries only one abnormal gene is not affected by the disorder. He must have abnormal genes at this particular locus on both chromosomes to be affected. The most common marriage producing children affected with autosomal recessive disorders is that between two asymptomatic carrier parents. Therefore as one looks at the pedigree, there are usually multiple sibs involved in one generation only. The disorder is not transmitted directly from one generation to another; it affects males and females in equal ratio; and on the average in this particular mating, one in four offspring will be affected. Two out of four will be asymptomatic carriers. One out of four will be normal, not even carrying the gene, and cannot transmit it to the next generation. An affected individual married to a carrier will produce 50 per cent affected and 50 per cent carrier individuals. A carrier married to a normal produces half carriers and half normal. An affected

INHERITED CANCER / Jackson

spouse married to a normal person will produce all carrier individuals. Therefore, the gene is often transmitted from one generation to another without the disorder ever appearing. This is why people are often astonished when they are told that they have an inherited disorder, since it has never before appeared in the family (Figure 3).

XERODERMA PIGMENTOSUM

Xeroderma pigmentosum is a disorder inherited in simple autosomal recessive fashion in which all affected individuals develop skin carcinomas in the exposed areas. Ataxia telangiectasia is an interesting disorder readily recognized by multiple telangiectases about the conjunctivae that may extend over the bridge of the nose or the upper part of the face and characteristic ataxic signs of cerebellar disease. One of our patients was admitted to the hospital at age 19 because of persistent nausea and vomiting. An enormous polypoid mass filled the stomach. At the time of surgical exploration the mass was a gastric adenocarcinoma with typical signet ring cells on histologic examination. She had a feeding gastrostomy but soon expired. At autopsy there were multiple metastases and no germinal centers in the lymph

nodes. She also had a lung abscess and lacked gamma A immunoglobulins. Gamma A is the immunoglobulin that is secreted into the respiratory tract and is really the first line of defense against pulmonary invasion. Her gamma G and gamma M immunoglobulins were actually higher than normal and her parents and her unaffected sibs all had normal levels of all three immunoglobulin classes.

Our patient was the youngest of 12 sibs, five of whom had ataxia telangiectasia. All of the other affected sibs were dead. Her next older sister, who had died at the age of 21, also had a gastric adenocarcinoma histologically indistinguishable from that of our patient. It had been previously reported that individuals with ataxia telangiectasia had a predisposition to leukemias and lymphomas. We feel that with the demonstration of gastric adenocarcinoma in two young sibs that we need to consider that ataxia telangiectasia predisposes to malignant tumors in general, not just to leukemias and lymphomas. Thymic dysplasia and a high percentage of chromosome breakage and rearrangement of chromosomes in tissue culture are also characteristic of ataxia telangiectasia. In addition, the peripheral blood lymphocytes fail to respond adequately to stimulation in tissue culture.

AUTOSOMAL RECESSIVE GENE TRANSMISSION

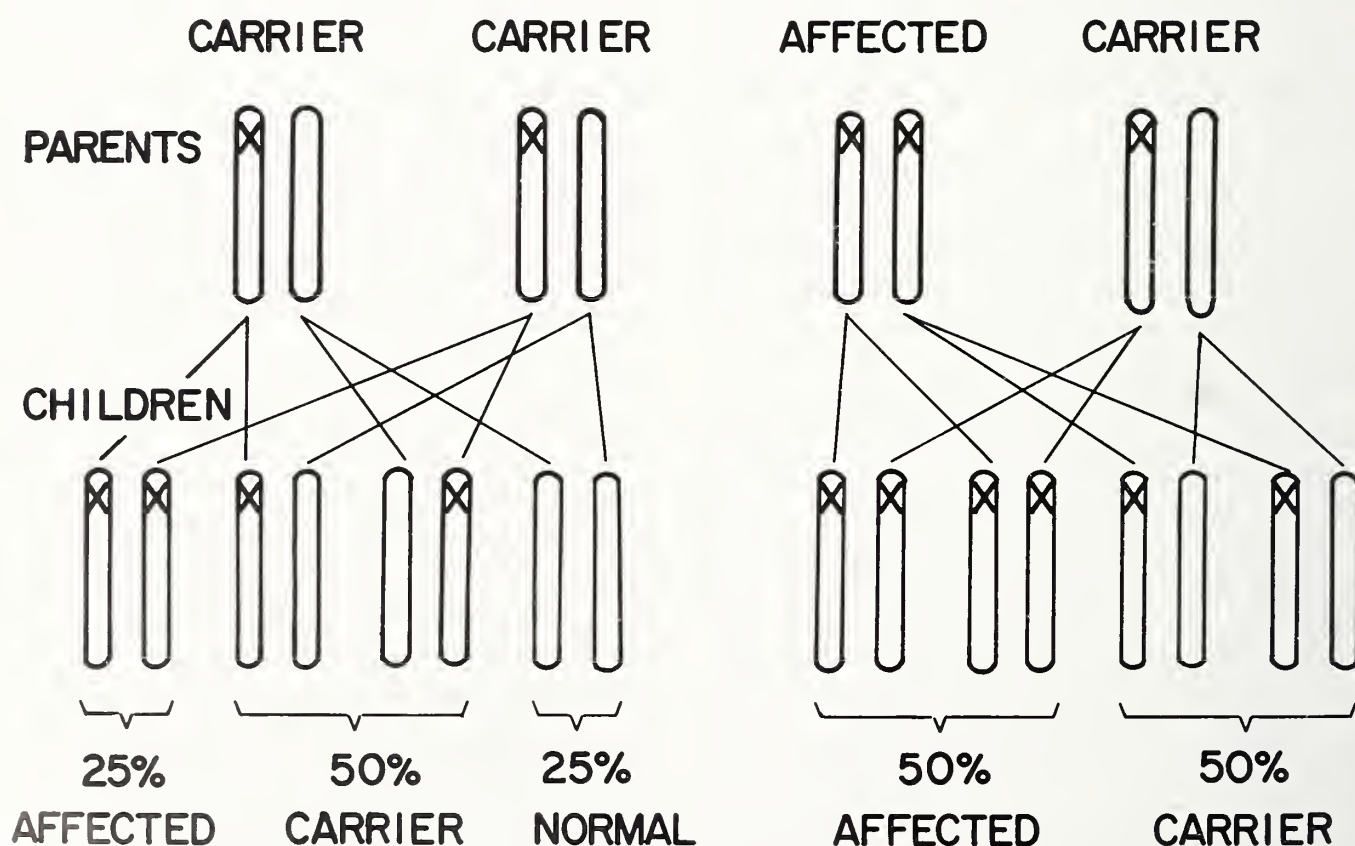


Figure 3

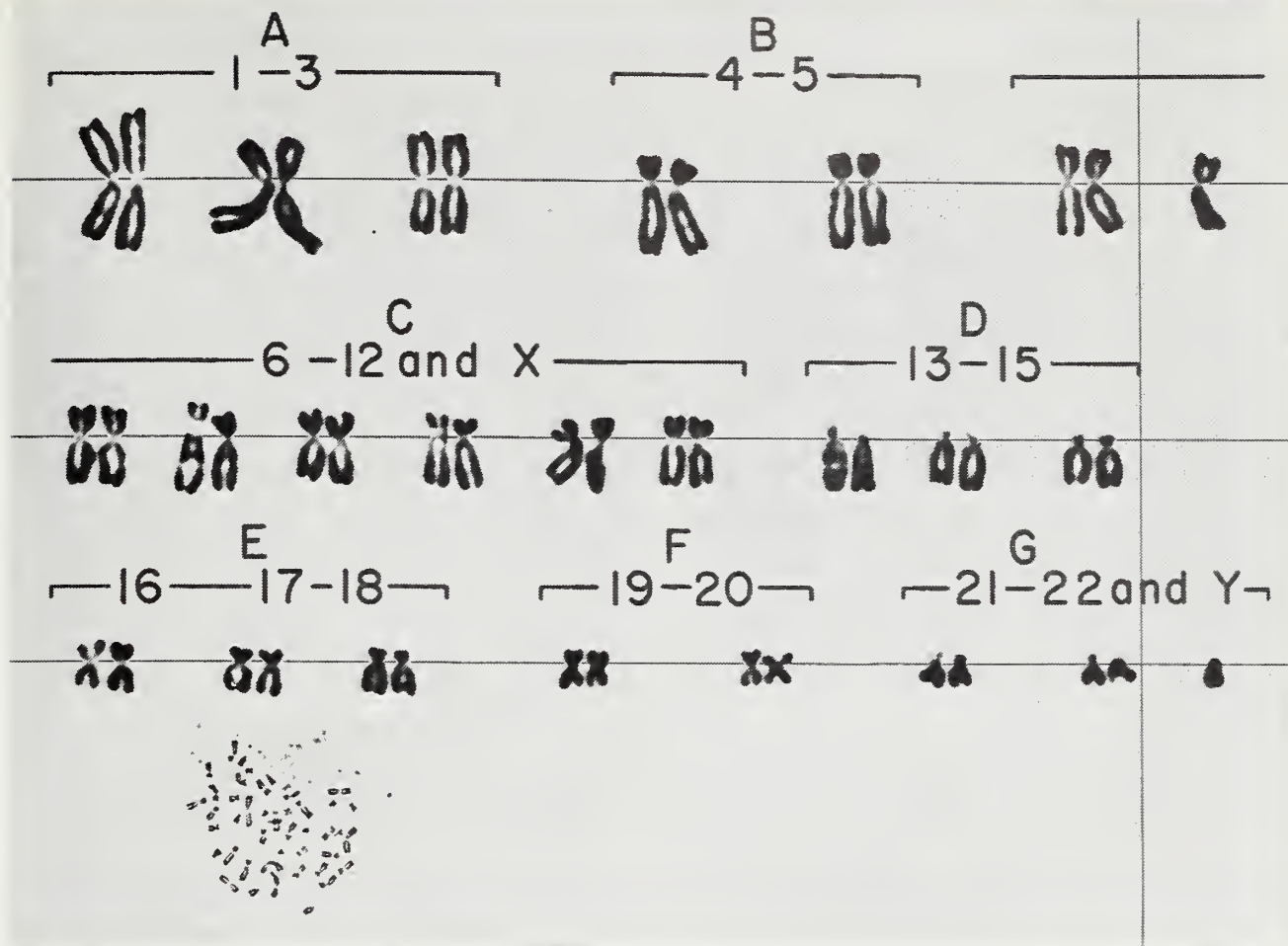


Figure 4. Normal male karyotype.

In addition to ataxia telangiectasia, two other disorders inherited in an autosomal recessive pattern also have excessive chromosome breakage and rearrangement. One is Bloom's syndrome, or telangiectatic dwarfism, and the other is Fanconi's congenital anemia. These two disorders share with ataxia telangiectasia the predisposition to the development of leukemias. Chromosome abnormalities are an integral part of the development of malignant tumors. It is interesting to speculate that in Bloom's syndrome, Fanconi's anemia, and ataxia telangiectasia, the predisposition to chromosome breakage allows for genetic variability and ultimately the evolution of malignant tumors.

CYTOGENETICS

Cytogenetics is concerned with what we can see in the microscope. Chromosome analysis is performed using an ordinary light microscope. The electron microscope is not necessary to study human chromosomes. Since the largest chromosome is about as long as the diameter of a red blood cell there is no difficulty in seeing this in the ordinary light microscope using oil immersion. A photograph of the chromosomes scattered about the cell is enlarged to 8 x 10. Each chromosome is cut out with scissors, paired with its

homologue and arranged in descending size to form what is known as a karyotype. Figure 4 is a normal male karyotype with the autosomes to the left of the vertical line and the sex chromosomes to the right, in this case one X and one Y chromosome. The normal female karyotype is the same except that the sex chromosomes are two X chromosomes (Figure 4).

One fairly frequent chromosome abnormality produces gonadal dysgenesis or Turner's syndrome in which there are only 45 chromosomes and only one sex chromosome, an X chromosome. Turner's syndrome characteristically presents as a phenotypic female who is short of stature, has an increased carrying angle of the arms, frequently a webbed neck, has fibrous tissue streaks for ovaries and as a result of the lack of ovarian stimulation fails to menstruate. Not all individuals with Turner's syndrome have exactly the same type of chromosomal abnormality. Many have a mixture (mosaic) of cells with some that are XO and some XX. In rare cases the chromosome constitution includes some cells with XY male sex chromosomes. Individuals who have the phenotypic Turner syndrome but have some XY cells, have a very high incidence of tumors of the ovary, usually gonadoblastoma. This is a

special indication for exploration and removal of the streak ovaries.

Chromosome analysis on another of our patients showed he had only 45 chromosomes and was missing a chromosome in the C group. He had myelofibrosis with myeloid metaplasia, which is considered to be a premalignant lesion by many in that people with myeloid metaplasia frequently terminate with acute leukemia. Other cells from that same individual contained 90 chromosomes instead of 45 chromosomes. In all probability the 90 chromosome cells evolved from the abnormal 45 chromosome cell line by polyploidization. In about 0.5 per cent of the cells that we see in mitosis from normal peripheral blood cultures there is polyploidy, i.e., having 92 chromosomes or some other multiple of the normal number. At some time, a polyploid cell went through the process of chromosome duplication without an intervening mitosis. This is one way in which tumors develop their great genetic heterogeneity when the original chromosome number is abnormal, so that in this particular case there were two chromosomes missing from the 6 to 12 group.

Chronic myelogenous leukemia is the only ma-

lignant tumor associated with a specific chromosome abnormality. The abnormality is known as the Philadelphia one (Ph 1) chromosome, named for the laboratory in which it was discovered. The Ph 1 chromosome is one of the 21-22 group which has suffered a deletion, or breakage with loss of about one-half to two-thirds of its long arms. Most of the cases of chronic myelogenous leukemia have the Philadelphia one chromosome, and those who are Ph 1 positive have been shown to be more responsive to therapy than the ones who are negative. It occasionally appears in duplicate during the time in which chronic myelogenous leukemia may be transformed into acute leukemia. The acute leukemias, on the other hand, frequently have abnormal chromosome numbers but there has been no specific pattern. One of our cases of acute leukemia had a modal number of 47 and there was an extra chromosome belonging to the G group. Sometimes there may be 45 chromosomes, or 48, or some other number around the normal modal number of 46.

Malignant solid tissue tumors routinely exhibit chromosome abnormalities to a marked degree. Figure 5 is a karyotype from an individual with carcinoma of the lung and was prepared directly from a pleural effusion. It shows typical findings for malignant tumors, the wrong chromosome

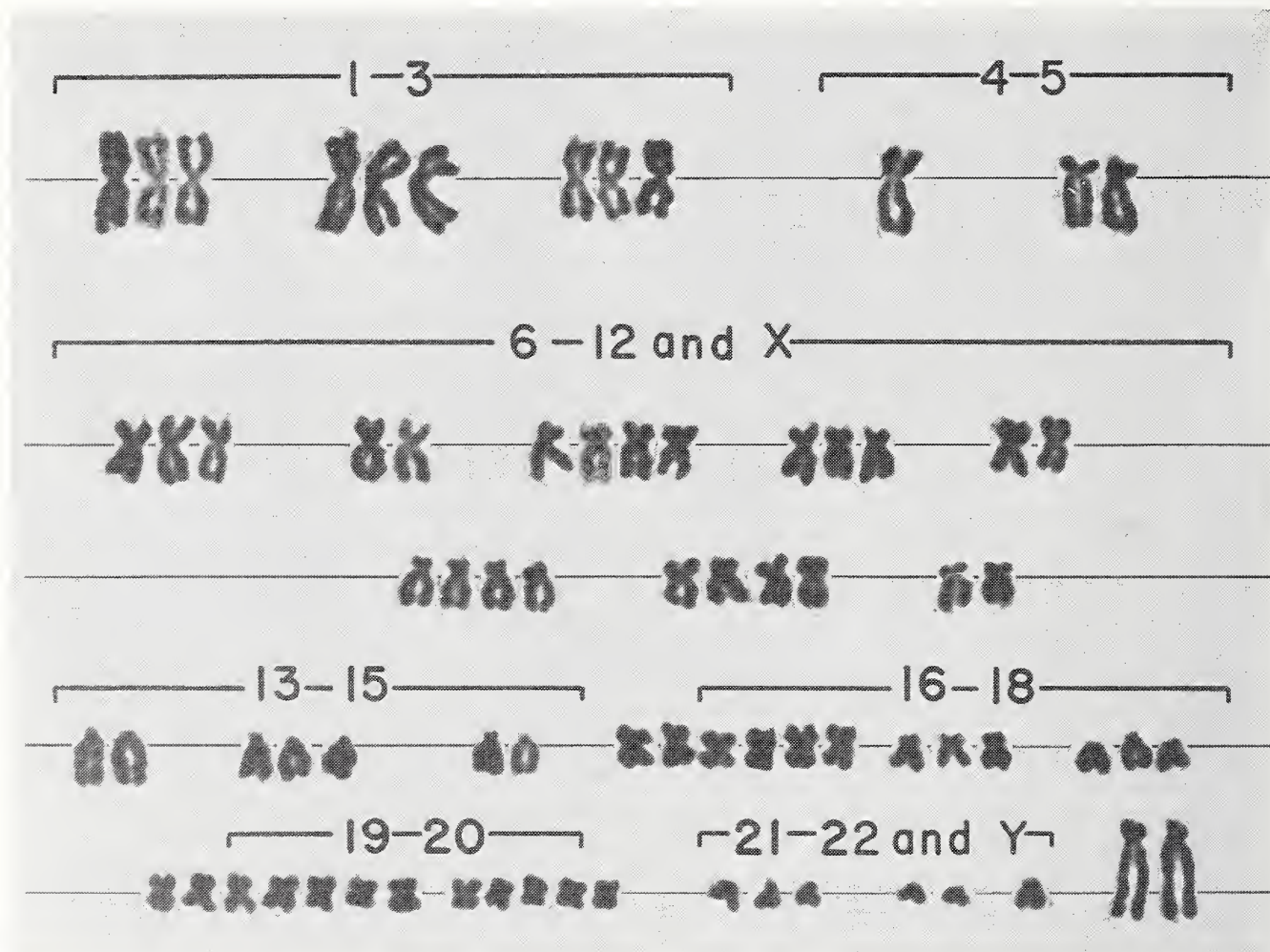


Figure 5. Karyotype of cell from pleural effusion due to carcinoma of the lung.

number (aneuploidy) obviously containing too many chromosomes, and there are incorrect numbers within the groups. Finally there are individual chromosomes called marker chromosomes which are different in size or shape from any of the normal chromosomes. They usually develop by the process of translocation involving breakage of two chromosomes with rejoining to form an abnormal chromosome. Occasionally there are chromosomes that look like two round dots stuck together. These are minute chromosomes that appear frequently in malignant central nervous system tumors of children. We have seen such minute chromosomes in a dysgerminoma from an 8-year-old child. The total chromosome number may be extremely high. Chromosome analysis of cells from effusions can be of help in individuals who are suspected of having malignancies as the cause for their effusions (Figure 5).

One of the things that has interested us for the past several years is why tumor cells become polyploid. It is not often that we have an opportunity to examine a biochemical mechanism for cytologic disturbances, but normal human leukocytes can be induced to become polyploid by treating them with β -mercaptoethanol. Cultures of normal human leukocytes treated with mercaptoethanol contain binucleate cells in some of which the two nuclei fail to separate, producing a striking resemblance to Reed-Sternberg cells seen in Hodgkin's Disease. Sometimes the chromosomes duplicate but fail to separate producing an endoreduplication in which the two like chromosomes lie side by side. Rarely a cell will undergo two chromosome replications without an intervening mitosis, producing an octoploid mitosis having four times the normal number of chromosomes. Occasionally some of the chromosomes are seen to be greatly fragmented.

Thus in tissue culture we have induced things that occur spontaneously in tumors. If these observations applied only to mercaptoethanol they would be of little significance because mercaptoethanol is not a normal physiologic metabolite nor

is anyone apt to be exposed to large concentrations since it has such a foul odor. But the amino acid cysteine also contains a sulfhydryl group. Cysteine can be transaminated to β -mercaptopyruvate, which also induces polyploidy in normal human leukocytes. We have been working on a hypothesis which supposes that with a decrease in enzymes that ordinarily remove mercaptopyruvate, that this physiologic intermediate might accumulate as a result of the normal metabolism of cysteine. Cysteine is also converted to cysteamine by decarboxylation in man. Cysteamine is one of the best known radio-protective agents, yet it also will induce polyploidy. These cytologic effects are probably not the process by which tumors are initiated, but may be one of the pathways by which tumors progress, perhaps explaining why individual cancer cells become polyploid.

Some disorders that are inherited in simple Mendelian fashion produce benign tumors which later may become malignant. Other inherited tumors are malignant at the time they first appear. Pedigree analysis allows differentiation of the specific inheritance pattern in many cases. Cytogenetic study can confirm the diagnosis in chronic granulocytic leukemia and may identify cancer as a cause for effusions. Correlative biochemical studies of enzymes and chromosome analysis may yield clues to the pathogenesis of chromosome abnormalities in malignant tumors. ★★★

2500 N. State St. (39216)

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USUAL AND CUSTOMARY

The plumber, called to unstop the kitchen sink, presented his bill for \$25 to the housewife's dismay and astonishment.

"Why, my doctor only charges \$8 a visit for treating my child," she complained.

"Yes, I know," replied the plumber. "That's what I charged when I was a pediatrician."

Radiologic Seminar XCVII

Ureteropelvic Junction Obstruction

NANCY W. BURROW, M.D.
Brandon, Mississippi

THERE ARE THREE anatomical points of narrowing in the normal course of the ureters; 1) at the ureteropelvic junction, 2) where the ureter crosses the iliac vessels, and 3) at the ureterovesical junction.³ The first of these will be considered with conditions leading to obstruction at this point.

By far the most frequent cause of UPJ (ureteropelvic junction) obstruction is a congenital stricture or narrowing or an abnormal vessel.² This is the most common urologic problem in infants and children, so commonplace in fact that a flank mass in a child should be considered a hydronephrotic kidney until proven otherwise. Severe degrees of obstruction may give rise to early symptoms and findings. Milder degrees may not become clinically apparent until adult life.

There is a distinct tendency for this condition to be a bilateral occurrence, but the dilatation may be less marked on one side so that only one kidney need be corrected. Minimal degrees of pyelectasis are clinically important, however, as this may be the basis for recurring infection.

Opinions differ greatly concerning types and causes of congenital obstruction of the ureteropelvic junction and when one considers the fact that at operation the nature of the obstruction sometimes cannot be determined, it seems too much to expect etiological information from a urogram. Mainly the urogram is of diagnostic

value only in the broad sense of recognition of the obstructive condition at the UPJ.¹ However, occasionally the urogram will distinguish between a high, nondependent insertion of the ureter into the renal pelvis and a ureter in the normally dependent position but narrowed or obstructed from stenosis, stricture or neuromuscular phenomena. Anomalous vessels crossing the area may be demonstrated with urogram or more definitely by aortography.

On a plain film of the abdomen most frequently no abnormality is noted. After injection of the contrast medium there can be a wide variation in the degree to which renal function has been altered. Good concentration of the medium may appear promptly; there will, however, be a dilated renal pelvis without obvious cause. The pyelectasis may be disproportional to the caliectasis; the calyces frequently remain sharp and well-formed. The ureter will be of a normal calibre.

This would appear to be a rather straightforward radiographic diagnosis, but there is one pitfall for all of us. If there is obstructive uropathy at some lower level in the ureter and the study is concluded prior to ureteral filling, the films will resemble UPJ obstruction. Advanced vesicoureteral reflux has been reported to simulate UPJ obstruction due to continued pelvic filling from reflux rather than obstructive disease.⁴

The point to be gained here is that a diagnosis of UPJ obstruction should be substantiated with the visualization of a normal ureter distal to the

Sponsored by the Mississippi Radiological Society. From the Department of Radiology, Rankin General Hospital.

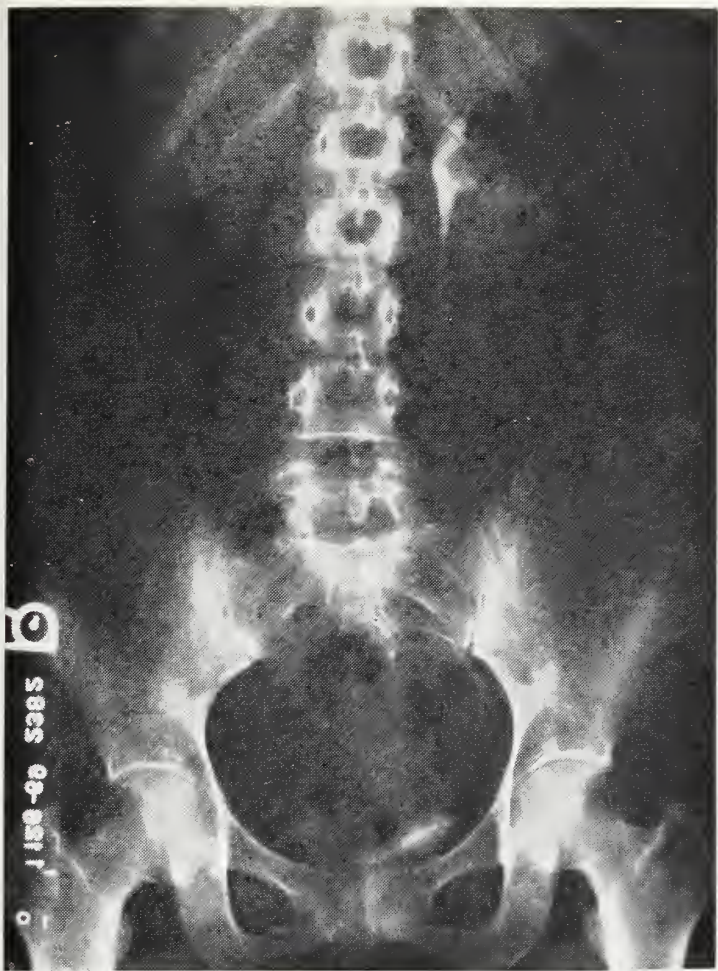


Figure 1. Radiograph ten minutes after IV injection of contrast media shows delayed function on the right with a normal left upper renal tract.

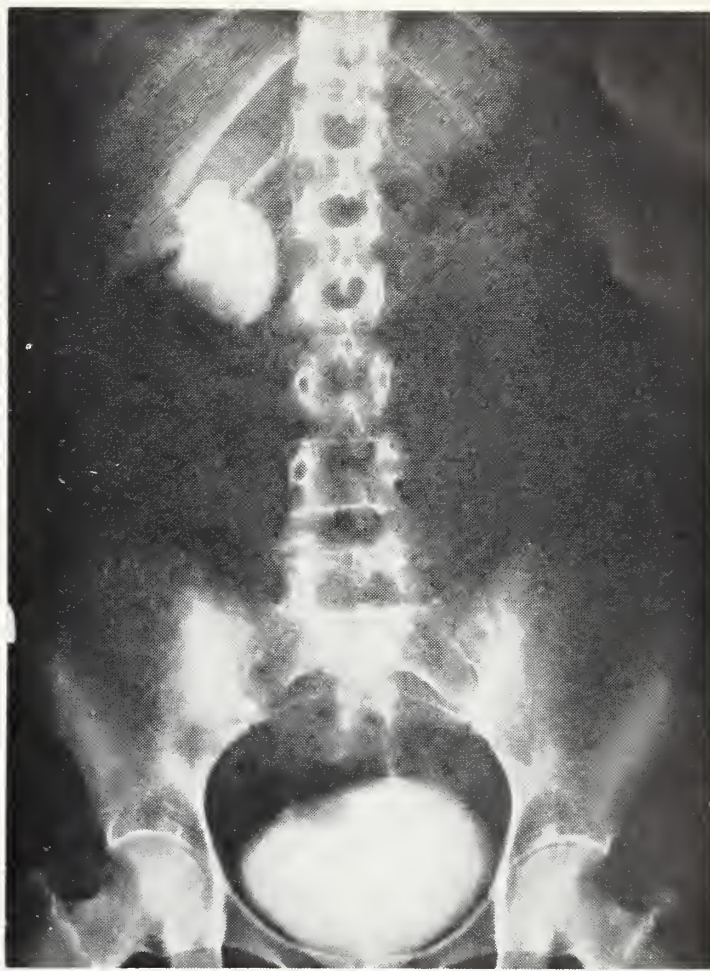


Figure 2. Delayed radiograph on the same patient demonstrating hydronephrotic right kidney secondary to obstruction at the ureteropelvic junction. Note that the left upper renal tract has completely drained.

UPJ. If the obstruction is complete or advanced, retrograde studies may be necessary to demonstrate the normal ureter.

Conditions which may present a similar radiographic picture would include a stone lodged at the UPJ; tumors, both intrinsic and extrinsic to the collecting system; aortic aneurysm, and some inflammatory lesions.⁵

In general, mild degrees of ureteropelvic obstruction with pyelectasis and little or no caliectasis are best left alone. Indications for surgery include pain, calculi infection and destruction of renal substance. In borderline cases a conservative approach is best with yearly urograms to determine if the condition is progressing.

Whenever a kidney is approached surgically for a stone, the surgeon should consider the possibility of associated obstruction of the ureteropelvic junction as an etiological factor in calculous formation.¹

Success of operation on the ureteropelvic junction is evaluated on the basis of clinical and uro-

graphic results. The patient may become asymptomatic yet the postoperative urograms may show little or no change. On the opposite extreme some cases may have a normal appearing postoperative study.

Regardless of etiology, the clinical importance of prompt diagnosis of a UPJ obstruction is obvious as this condition is amenable to surgery with salvage of the kidney. ★★★

Rankin General Hospital (39042)

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Medicine for the 70's: Decade of Decision

JAMES L. ROYALS, M.D.
Jackson, Mississippi

THE DELIVERY SYSTEM which purveys medical care to Americans is on trial. Agencies of government engaged in care financing are attacking the system. A variety of proposals for radical change are heard in the halls of Congress. Insurance and Blue plans are introducing subtle influences upon it. And we ourselves in medical organization, the staunchest advocates of the system, are raising questions about it.

As if this were not enough to strain the fabric of medical organization, substantial forces from the mass media and social interest groups appear to have decided that any ill of mankind, whether physical, mental, or otherwise, is somehow related to the real and fancied deficits of our medical care delivery system. The decade of the '60's brought change in medical care financing with Medicare and Medicaid, and the administration of these programs has exerted an impact upon delivery patterns.

So it should come as no surprise that I have found unrest among my colleagues and a creeping insecurity in our ranks. We have discovered that it is not easy to adjust to change, especially when much of it is brought upon us by outside sources.

I do not or could not claim perfection for our care delivery system. Growing older, I confess to an increasing discomfort with change, and I find myself resisting it more frequently. But we must recognize that we are living in a dynamic time, a time of rapid and dramatic change, of new and varied social forces, of miraculous technology, and of troubled political balance in a volatile world.

President, Mississippi State Medical Association, 1969-1970.

Read before the House of Delegates, 102nd Annual Session, Biloxi, May 11-14, 1970.

We must not only adjust to change, but we must also exercise leadership that will conceive and direct the course of changes within medicine

The care delivery system is on trial, says the 1969-70 president of the association. The challenges are great, and medical organization must work together or fail in the responsibilities it has assumed. Physicians must be prepared to make substantial contributions of time and substance to preserve a pluralistic delivery system and to insure the best medical care for all Mississippians and for all Americans.

and medical care delivery. An inquisitive outreach in a constant search to improve and a willingness to experiment with promising change are hallmarks of medical progress. Let us look to the young for increasing leadership responsibility in our search for better health care. Toward this end, I applaud the move to bring medical students into more active participation in medical affairs.

It has become forcefully apparent that there is a serious shortage of medical manpower in our nation. Compounding the problem has been a vast expansion of the care purchasing base through government-financed programs. And increased demand for medical services results not only from increased ability to purchase but also from rising levels of health education and from the deceptively simple fact that there are more of us to consume care.

Mississippi has the lowest physician-to-population ratio of any state in the union. Nationally, there is a physician for every 750 Americans. In

our state, we have one physician for every 1,400 Mississippians. The ratios for other members of the health care team are similar and we stand at the national midpoint on medical facilities.

An expected consequence is a burdensome workload upon our medical team. While the majority of Mississippians receive excellent care, many do not. We must in all candor and honesty recognize that there are large groups in our state who receive little or no medical care. It is not sufficient for us to proclaim that we never turn a patient away or to say that we will care for anyone who comes to us.

Many of our Mississippi citizens who receive little or no care are so deprived economically as to be unable to seek medical services. Now, it is important to recognize also that neither the problem nor the solution is the total responsibility of the medical profession, but we have leadership responsibilities in seeking solutions which are inescapable.

We need new and innovating methods of taking medical care to the poor within the best framework available, our private care delivery system. We must assist and lead in developing a strong, positive outreach to those who are remote emotionally, educationally, intellectually, and economically.

INEVITABLE COURSE

We must do this because it is the good and proper course. But it has also become abundantly clear that if we do not do it, then it will be done by others under circumstances not of our making or desire. If we are unable to lead in bringing good and sufficient medical care to all of our citizens, then we should lose the leadership posture we occupy for we would not have measured up to the task.

The outreach to the poor, the deprived, and the remote is particularly needed in the rural areas of our state, and the growing core of our cities should not escape attention. I call on medical organization to rise to this serious and demanding challenge. Some mechanisms for extending care already exist: Medicaid which sorely needs our help to succeed from its late and shaky beginning, our system of public health departments and public welfare agencies which can assist in case finding and care organization, and specialized agencies of state government with unique abilities to coordinate and furnish information.

In the midst of this massive effort, medicine must also look within as well as outside. We must be the masters of our own house. The vast ma-

jority of Mississippi physicians, as is true of all American physicians, are competent, honorable individuals. But there are a few self-serving physicians who bring discredit upon us all. They are the underscored examples of ills, evils and abuses heaped upon us by free-swinging mass media, those who seek any means of social change, and those who decry and destroy but who offer no solutions.

PEER REVIEW PROGRAM

Within our own ranks, we must develop a working system of peer review as an effective instrument for self-regulation. The unacceptable alternative—and it is virtually upon us—is submission to third parties who would sit in judgment upon the quality of care and the price paid for it.

Physicians are best equipped to make these judgments, but we must make responsible and worthy judgments if we are to have them accepted.

Your Board of Trustees has already initiated a peer review program, and we must support this useful beginning with our time, knowledge, and substance. We must now extend this service to the component society and medical community levels, not merely in name but absolutely in fact. Peer review committees should gather together the functions of care quality review, fee review, and grievance committee activities under a single banner. It should become the point of reference and the point of appeal.

The work of peer review should include but not be limited to resolution of differences between patient and physician, review of the quality of medical care, adequacy and/or reasonableness of fees, whether due or paid from private or public sources, utilization of health care resources, and liaison with private and public sources of medical care financing.

EDUCATIONAL ASPECTS

Perhaps most important of all is the thrust of peer review which is not punitive but educational and corrective. We must learn to work in harmony with peer review and honor the judgments of our colleagues. Otherwise, we shall certainly be judged by others.

Still other serious and threatening challenges come from within our state. During the past 10 months, the Legislature has been in session on two occasions. The 1969 Extraordinary Session was called to consider Medicaid, and the first of the annual Regular Sessions was conducted this year.

Medicaid was enacted at the last minute for its

PRESIDENT'S ADDRESS / Royals

implementation in Mississippi. It is a minimum program with massive problems, one which urgently requires the support and understanding of all to succeed. During the special session, there was clear and unmistakable unrest among legislators and frequent sharp differences of philosophy and viewpoint with the health care team.

In the Regular Session, dozens of bills related to medical care and practice were introduced. We literally moved from one legislative crisis to another, losing some, winning some, and prevailing on occasion by the thread-like margin of a single vote. While the scoreboard shows that we came out well on bills we supported and those we opposed, our position was extremely tenuous at all times. In all frankness, we experienced hostility toward medicine, and we know that our communications must be improved.

We must communicate with the physician in his hometown, and he must communicate with his representative and senator. We must be informed on the issues, and daily dialogue with the legislator is indispensable. We need reasoned, positive programs to offer, not just stonewall opposition. I have learned by unforgettable experience that it is not enough to write your legislator a letter or talk to him on one or two occasions. Constant, continuing contact is essential, and the legislator must learn that you have a vital interest in the issues, his position, and his vote.

LEGISLATIVE PROGRAM

We must beef up our legislative effort and program, provide more staff support, and be willing to give more time personally in this activity.

As I look critically at the manner in which I practice and observe my colleagues, I arrive at the inescapable conclusion that we could practice more efficiently. It may also be fairly noted that there are inefficiencies in our free enterprise system, although it has our support and dedication. Prepaid group practice, more popularly known as closed panel medicine, such as Kaiser-Permanente, offers the advantage of efficiency. We need to adopt measures for efficiency in our private delivery system to be more effective and to contain or even reduce health care costs.

For every inefficiency in our private delivery system, cost is added, and the cost of illness is rapidly becoming unacceptable to the American public. We as physicians must exert every effort to bring under reasonable control the spiraling costs of care.

What every Mississippian must understand is that the circumstances under which medical care is rendered are not necessarily those of medicine's choosing or devising. The care climate is the product of the total social, political, cultural, and economic environment. No thinking person would say that hospitals, the worst offenders in mounting health care price spiral, have deliberately inflicted upon themselves these horrendous cost problems. Physicians clamoring for associates in demanding practices have not willed a shortage of medical manpower.

The simple truth of the matter is that virtually every system of service, almost every good that is purchased, and every law that is truly obeyed are what society wants them to be. To those who choose to ignore this basic axiom of human nature and charge that American medicine would turn back the clock, we reply that a science which has moved itself a century ahead in the span of a generation is much more the victim than it is the architect.

LEADERSHIP ROLE

We cannot alone stand accountable for infant mortality in the city ghetto with slums, lack of sanitation, and inattention to personal hygiene. But we can and must assume a leadership role in the circumstances of care delivery, in taking it into areas of deficit, and in organizing care for accessibility and availability.

Our delivery system is pluralistic, not monolithic. We have been consistent in opposing—in the interests of all—the monolith, be it one of government, of institutions, or a specific ideal or force of society. We should therefore be willing to experiment and to innovate, because the give-and-take of pluralism is a far better state than the ultimate inflexibility, circumscribed choice, and single-system domination of the monolith. We can infuse the flexibility we seek better than any other source, because we carry the responsibility for rendering medical care.

MEDICAL ORGANIZATION

We are organized together to seek and achieve these worthy goals, to assume these tasks of leadership, and to meet our responsibilities. It is the obligation of every physician to work with his colleagues toward these ends, to contribute his share, to give his best thinking, and to make up his part of the whole.

The most tragic hour in American medicine comes when a physician withdraws himself in spirit and substance from medical organization.

He renders himself impotent and he chips a stone from our foundation. The whole is never greater than the sum of its parts, and no man is an island. His dissent should not be translated into destruction of his organization, of his colleagues, or of himself. He simply does not have that right.

Medical organization, from the component society through the state association of AMA, is responsive, democratic, and flexible. We must all

work together or fail in the responsibilities we have assumed.

The delivery system is on trial. Our circumstances are neither easy nor simple. But the challenges are great, and the gauntlet is down. Let us do what we must to insure the best medical care for all Mississippians and for all Americans. ★★★

918 North State St. (39201)

GREATER LOVE HATH NO MAN

The career girl had worked hard and saved her money for a much-desired cruise vacation. Her diary records the events:

July 5: Ship departed San Francisco for the South Seas. Away at last. Captain of ship is a very handsome and dashing man.

July 6: Captain invited me to dinner at his table. Delightful.

July 7: Captain invited me to visit bridge and then to his quarters. He is a most ardent and passionate man. Says if I do not accept his advances he will blow up ship with 650 passengers and crew.

July 8: I have just saved 650 lives.

Constitution and By-Laws of the Mississippi State Medical Association

CONSTITUTION

Preamble

That more may live longer in the richness and comfort of health; that pain, suffering, and disease may be eradicated to the extent made possible by scientific medical knowledge; that the standards of the medical profession may be maintained on the highest plane of honor, we dedicate ourselves as physicians through this Association. Among us, membership is a privilege, earned by professional qualification, personal honor, and selfless service; it is not a right vested superficially nor by statutory licensure. Truth shall be our quest; diligence, our staff; and service, our purpose.

Article I

NAME OF THE ASSOCIATION

The name and title of this Association shall be the Mississippi State Medical Association.

Article II

PURPOSE OF ORGANIZATION

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Mississippi and to unite with similar associations in other states to form the American Medical Association, with a view toward the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws, to the promotion of friendly intercourse among the physicians and to guarding and fostering of their opinion in regard to the great problems of medicine, so that the profession shall become more honorable and capable within itself, and more useful to the public in the prevention and care of disease, and in the prolonging of and adding comfort to life.

The purpose of this Association shall be to promote scientific medical research and practice and it shall be a non-profit organization.

Article III

COMPONENT SOCIETIES

Component Societies shall consist of those societies which hold charters from the Association.

Article IV

MEMBERSHIP

Section 1. Members of the Mississippi State Medical Association. Members shall be active, associate, or emeritus, according to requirements and provisions of the By-Laws. There may also be invited guests. Membership other than associate shall be construed as active in connection with the rights and privileges accruing therefrom.

Section 2. Guests. Any physician not a resident of the state may become a guest during any annual session upon invitation of a member of the Association, and shall be accorded the privilege of participating in all the scientific work of that session.

Article V

SESSIONS AND MEETINGS

Section 1. The Association shall hold an annual session during which there shall be held daily not less than two general meetings, which shall be open to all registered members and guests.

Section 2. The time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Board of Trustees shall have the power to fix, or change, either the time or the place, or both of the annual session.

Article VI

GENERAL OFFICERS

Section 1. The general officers of this Association shall be a President, President-elect, three Vice-Presidents, one from each Supreme Court District, Secretary-Treasurer, Speaker, Vice Speaker, and Editor.

Section 2. The President, President-elect, and Vice-Presidents shall hold terms of one year. The Secretary-Treasurer, Speaker, Vice Speaker and Editor shall be elected for terms of three years.

Section 3. The officers of this Association shall be elected by the House of Delegates on the last day of the annual session following the adjournment of the general meeting, but no person shall be elected to any such office who has failed to attend two-thirds of the past two and current annual sessions and who has not been a member for the past two years.

Section 4. In addition to these general officers, there shall be an Executive Secretary who need not be a physician or member of the Association. He shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. His compensation and expenses for duties performed shall be fixed by the Board of Trustees and confirmed by the House of Delegates.

Article VII

EXECUTIVE OR CENTRAL OFFICES

The Executive Secretary shall maintain in the city of Jackson suitable offices for the discharge of his duties and for conducting the administrative affairs of the Association.

Article VIII

HOUSE OF DELEGATES

The House of Delegates shall be the legislative, business, and policy-making body of the Association and shall consist of (1) delegates selected by the component societies under authorized apportionment, (2) the general officers of the Association, (3) all past presidents, provided they still be members in good standing of the Association, (4) members of the Board of Trustees and Councils, and (5) elected committees, Delegates and Alternate Delegates to the American Medical Association, members of the State Board of Health, and members of the Board of Trustees of Mental Institutions, all of whom must be members of this Association.

Article IX BOARD OF TRUSTEES

The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates and shall perform such duties as are prescribed by law governing directors of corporations and in the By-Laws of the Association. The Board shall consist of nine members, one from each Association District, elected for terms of three years each. A Trustee shall not serve more than three consecutive terms.

Article X FUNDS AND EXPENSES

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by annual dues, per capita assessments upon the membership, and by voluntary contributions. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, publications, and for any other purpose approved by the House of Delegates.

Article XI THE SEAL

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been sent officially to each component society at least two months before the session at which final action is taken.

BY-LAWS

Chapter I MEMBERSHIP

Section 1. Eligibility. Each component society of the Mississippi State Medical Association shall judge the qualifications of candidates for election to membership therein, which shall be restricted to those persons who hold the degree of Doctor of Medicine from an appropriately accredited source as defined by the American Medical Association, or in lieu thereof, a foreign degree in medicine which is an acceptable equivalent to the Board of Trustees and shall be a citizen of the United States. All candidates for any degree of membership other than associate must be legally licensed to practice medicine in Mississippi. Persons who obtained this degree prior to January 1, 1917, need not comply with this requirement but must be licensed to practice medicine in Mississippi or, if offering to practice in Mississippi must be eligible for license by reciprocity and be a member in good standing of a constituent (state) association of the American Medical Association. Membership in a component society, evidenced by the payment of dues for the current year, shall be a prerequisite to membership in the Association, except that a physician upon his initial application for membership in a component society of the Association shall be required to undergo a waiting period of ninety (90) consecutive days from the date he begins the practice of medicine in the geographical area of the component society before he may be elected to membership in the component society. No physician shall be eligible for membership

who has been convicted of or who has plead guilty to either a felony or a violation of a state or federal narcotics law. The duly certified court record shall be *prima facie* evidence of pleas and convictions and cause automatic revocation of membership. No physician shall be eligible for election to or continuation of membership who does not possess a currently effective federal narcotics stamp, provided, however, that physicians in full time government service who need no registration to use, prescribe, and dispense narcotic drugs and those who, by reason of type of practice, employment, inactivity, or retirement, neither prescribe nor dispense narcotics and who for this reason alone have not applied for registration shall be exempt from this requirement.

Section 2 (a). Good Standing. Only those members in good standing shall be entitled to the rights and privileges of membership. A physician not in good standing may not be elected to office nor exercise the privilege of voting or attending any session of this Association, scientific or otherwise. The name of a physician upon the properly certified roster of a component society which has paid its annual assessment shall be *prima facie* evidence of his right to register at the annual session of the Mississippi State Medical Association. No member shall participate in any of the proceedings of the annual session until he is duly registered. No delegate or other member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section. (b) Change of State Residence. In the event that a member moves from the State, his membership shall continue until, and lapse at the end of, the current fiscal year, but this provision shall not operate to prevent a physician who moves from the state continuing his membership by payment of all dues and assessments to the state Association. (c) Obligations of Membership. When the Executive Secretary of the Mississippi State Medical Association is officially informed by the secretary of a component society that a physician is not in good standing in the component society, he shall remove the name of the physician from the rolls of the Association. A member shall hold his membership through the component society in the jurisdiction of which he practices, provided that a physician living on or near a county line may hold membership in the society most convenient for him to attend. If the society in which he chooses to secure membership does not exercise jurisdiction over the area of his residence, then permission must be obtained from the jurisdiction society to facilitate his affiliation with the extra-jurisdiction society.

Section 3. Degrees of Membership. Members of the Mississippi State Medical Association shall be divided into the following classifications: Active, emeritus, and associate. (a) Active Membership. Active members shall include all eligible members of component societies in good standing, providing that all dues and assessments in this Association as may be hereinafter prescribed have been received by the Association. (b) Emeritus Members. Any members of the Mississippi State Medical Association who has been an active member for any ten consecutive years and shall have permanently retired from the practice of medicine shall be eligible for election to emeritus membership. Election to emeritus membership for reason of retirement in the case of permanent and total disability shall merit special consideration but shall be subject to ruling by the Board of Trustees. Election to emeritus membership shall be based on the recommendation of the component society and the approval of the Board of Trustees. (c) Associate Membership. Any commissioned medical officer in the United States Army, United States Air Force, United States Navy, or United States Public Health Service, or any physician in the employ of the Veterans Administration, not licensed to practice in the State of Mississippi, stationed in Mississippi, members of medical faculties of medical schools in Mississippi, approved by

HEALTH SERVICES BOARD

the American Medical Association, who are not licensed to practice in the state, any hospital intern, or any hospital resident in Mississippi, may, on election to associate membership by the component society in whose jurisdiction the physician resides become an associate of the Mississippi State Medical Association. Associate members shall not vote or hold office.

Section 4. Dues and Assessments. A per capita assessment determined by the House of Delegates shall constitute the dues of the Association, which assessment shall be collected from all active members by the respective secretaries of the component societies, provided that new members shall be accepted on payment of three-fourths of annual dues after May 1 and one-half of annual dues after September 1. Each active member shall pay the prescribed dues to the officer designated by the component society for transmittal to the Executive Secretary of the Association. Dues shall include a subscription to the official publication of the Association. (a) Members Excused From Payment. The Board of Trustees may, by majority vote, excuse a member from payment of dues because of undue hardship or similar circumstances warranting special consideration provided that the component society shall have excused in full the payment of dues for periods exceeding one year. Such circumstances shall be interpreted to include extended illness and temporary disability. Members who shall have attained age 70 and who have been active members of the Association for any 10 consecutive years may, upon request, be exempt from dues for life effective January 1 after the 70th birthday, and such exemption shall continue so long as the member continues in good standing in his component medical society. (b) Emeritus Members. Physicians who have been elected emeritus members shall not be required to pay dues in the Association. (c) Payment of Dues and Delinquency. Dues of the Association are due and payable on December 31 of the year prior to that for which dues are prescribed. Failure to pay dues by April 1 of the year for which due shall result in forfeiture of membership privileges and the removal of the member's name from the rolls of the Association. A five dollar (\$5.00) reinstatement cost shall be assessed against any member who is delinquent by reason of non-payment of dues after April 1 of the year for which dues are payable. A member in good standing who is called to active duty with the Armed Forces of the United States other than in the regular component shall be carried as an active member without payment of dues until such time as he is released from military service.

Section 5. American Medical Association. Members of this Association shall pay the dues or hold a legal exemption from the dues of the American Medical Association. These dues shall be paid through the component society to the Executive Secretary of the Mississippi State Medical Association, whose duty it shall be to transmit them to the American Medical Association and to obtain proper credits and receipts therefor.

Section 6. Revocation of Emeritus or Associate Membership. Any emeritus or associate membership may be revoked by two-thirds vote of the House of Delegates when, in the opinion of the House of Delegates, the conduct or actions of the emeritus or associate member violates any of the principles of the code of ethics or whose conduct or actions are not becoming to the honor conferred.

Chapter II

ANNUAL AND SPECIAL SESSIONS

Section 1. Time and Place. An annual session shall be held as required by Article V, Section 1, the Constitution of the Mississippi State Medical Association, which session shall in any event be held prior to the annual session of the American Medical Association. The place of the state session shall be fixed in accordance with Article V, Section 2, the Constitution of the Mississippi State Medical Association.

Section 2. Special Session. A special session of the Association or of the House of Delegates may be called by the President, with the approval of the Board of Trustees. The Board of Trustees is empowered to call a special session by majority concurrence.

Section 3. Inviting an Annual Session. A component society desiring the Association and House of Delegates to meet in annual session in a city within its jurisdiction may submit an invitation in writing or verbally through its representative to the House of Delegates at the annual session concerned with the selection of the site for the next regular scheduled meeting. The dates and site of the annual session selected may be changed by majority vote of the Board of Trustees in an emergency requiring such a change.

Section 4. Registration Privileges. Only the following shall be permitted to register at any session:

- (a) Active members
- (b) Emeritus members
- (c) Associate members
- (d) Invited guests
- (e) Medical students of American Medical Association approved medical schools who are certified to the Executive Secretary of the Association by their respective deans.
- (f) Interns and residents who are graduates of American Medical Association approved medical schools and who are connected with an approved hospital and who are certified to the Executive Secretary of the Association by their respective hospital superintendents in event they are not associate members of the Association.
- (g) Commissioned medical officers of the United States Armed Forces who are on active duty and who if not associate members are certified to the Executive Secretary by their Post or Base Surgeons or Commanding Officers.

Section 5. Indebtedness. A member shall not be permitted to register unless all current indebtedness to both the Association and component of proper jurisdiction has been paid.

Section 6. Admittance. Admittance to any meeting of the House of Delegates, any scientific section, or any of the various exhibits at an annual session of the Association shall be limited to members in good standing, duly registered and invited guests, members in good standing of the Woman's Auxiliary to the Mississippi State Medical Association, duly accredited and registered members of the Press, and accredited technical and scientific exhibitors.

Chapter III

GENERAL MEETING

Section 1. Participation. The general meeting shall include all registered members and guests, who shall have equal rights to participate in the proceedings and discussions, but no member shall vote on any question coming before a section of the general meeting except those who have registered as members of such sections. Each section of the general meeting shall be presided over by its chairman. The address of the President and the Distinguished Service Oration shall be delivered before the general meeting at such time and place as may be arranged.

Section 2. Order. The order of exercise, papers, and discussions as set forth in the official program shall be followed from day to day until it has been completed. But no section shall be allowed to place more than five papers on its program, nor more than two invited guest essayists (out-of-state or non-member). When a section program is not completed within the time assigned, it shall not be allowed to continue into that assigned to another section.

Section 3. Time Restrictions. No address or paper before the Association, except those of the President and Orator, shall occupy more than twenty minutes in its delivery, except that guests may be allowed thirty

minutes; and in formal discussion no one shall speak more than five minutes; and in informal discussion no one shall speak more than three minutes and not more than one time.

Section 4. Essayists. With the exception of the invited guests, the essayists must be members of the Association. No name shall appear more than once on the printed program to discuss a paper before the regular scientific sections unless such person qualifies for membership as provided in these By-Laws.

Section 5. Papers. All papers read before the Association shall be its property. Each paper must be read by its author, and must be deposited with the Secretary when read.

Section 6. Failure to Read Paper. No author listed on the program who fails to read a paper at the session may be allowed a place on the program of the next annual session, but if the author, being unable to attend, shows his good intent by forwarding his paper to the Secretary before the annual session, he shall not suffer the penalty.

Chapter IV SCIENTIFIC SECTIONS

Section 1. Designation of Sections. The scientific sections of the Association shall be as follows: (a) Section on Medicine, (b) Section on Surgery, (c) Section on Preventive Medicine, (d) Section on Eye, Ear, Nose and Throat, (e) Section on Pediatrics, (f) Section on Obstetrics and Gynecology, and (g) Section on General Practice.

Section 2. Section Officers. Each scientific section of the Association shall, as the last order of business during its regular meeting, elect a chairman who shall serve for a period of one year. A majority of votes cast shall be necessary to elect. Additionally, each section shall elect a secretary whose term of office shall be for a period of three years and so arranged that secretaries shall be elected by their respective sections at the same annual meeting as follows: (1) Sections on General Practice and EENT, (2) Sections on Obstetrics and Gynecology and Preventive Medicine, and (3) Sections on Pediatrics, Surgery, and Medicine.

Section 3. Program. The Council on Scientific Assembly shall place any paper in its proper section. The Council shall so arrange the program that no one section shall be given precedence over others two years in succession.

Chapter V HOUSE OF DELEGATES

Section 1. Apportionment and Representation. Each organized county shall be entitled to representation in all regular and special sessions of the House of Delegates, one delegate and one alternate for each fifty members in the county and one delegate and one alternate for each fraction thereof, but each organized county holding a charter from this organization having made its annual report and paid its assessments, as provided in this Constitution and By-Laws shall be entitled to at least one delegate and alternate, said alternate delegates to act only in the absence of the delegate or delegates from the respective counties. No county in a component society shall be without representation in the House of Delegates; each shall be entitled to one delegate and one alternate without regard to total membership. No alternate may be seated at any regular or special session of the House of Delegates unless the delegates elected from that county shall be absent or otherwise unable to participate in the proceedings. In the event that neither the delegate nor the alternate is able to attend the regular or special session to which they have been accredited, then any *bona fide* resident of the county may, if properly registered, qualify himself as a delegate. No representative of the component society shall be seated in the House of Delegates until all his dues, assessments, and

obligations to the component society have been paid. Delegates and alternates shall be elected by their respective component societies for terms of not less than two years and shall assume office on the first day of the annual session following their elections; they shall be *bona fide* residents of the counties which they represent. Their names shall be reported to the Central Office of the Association not later than thirty days prior to the first day of the annual session. Representatives of component societies shall be seated in the House of Delegates only following their proper registration of credentials from the component societies they represent.

Section 2. Meetings and Attendance. The House of Delegates shall meet annually on the first day of the annual session of the Association. The House of Delegates shall meet for the conclusion of business on the last day of the annual session immediately following the adjournment of the last general or scientific session, provided that these requirements shall not operate to prevent such other meetings of the House of Delegates during the annual session as the House itself may order or the President or Speaker may deem necessary, but no such meetings may be called at times which would conflict with the scheduled general or scientific session. Duly registered members and guests may attend all meetings of the House of Delegates provided that they occupy a distinctly separate section of the meeting hall or auditorium and further provided that they shall not be permitted to participate in any phase of the meeting of the House of Delegates except on invitation of that body. By majority vote, the House of Delegates may enter into executive session, during which time only qualified delegates and officers of the Association may remain in attendance.

Section 3. Quorum. A three-fifths majority of registered and duly seated delegates of this Association shall constitute a quorum.

Section 4. Order of Business. The order of business shall be conducted at the pleasure of the House of Delegates, provided it shall not be in conflict with either these By-Laws or the Constitution. Meetings shall be conducted according to *Robert's Rules of Order, Revised*, and within the bounds of courtesy and this Constitution and By-Laws. Generally, the order of business shall be:

- (1) Adoption of the Transactions of the previous meeting.
- (2) Reports of Boards, Councils and Committees.
- (3) Reports of Presidential Committees.
- (4) Special Orders.
- (5) Unfinished Business.
- (6) New Business.

Section 5. Memorials and Resolutions. No memorials or resolutions shall at any time be issued in the name of the Mississippi State Medical Association by any officer or member thereof until such memorial or resolution has been approved and adopted by the House of Delegates or Board of Trustees.

Section 6. Duties and Responsibilities. It shall, through its officers and otherwise, give diligent attention to foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping stone to future ones of higher interest. It shall consider and advise the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto. It shall make careful inquiry into the condition of the profession of each county in the state, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in the counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county in the state has been brought

under medical society influence. It shall encourage post-graduate work in medical centers, as well as home study and research, and shall endeavor to have the results utilized and intelligently discussed in the component societies. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, the term of office to begin on January 1 of the year following that of the elections and continuing for two successive years. It shall, upon recommendation of the Board of Trustees, provide and issue charters to counties organized to conform to the spirit of the Constitution and By-Laws.

Section 7. Reference Committees. Business brought before the House of Delegates will normally be referred by the Speaker for hearing, debate, and recommendation to a reference committee. Sufficient reference committees shall be appointed by the President to expedite and assist in the deliberations of the House of Delegates. Such committees shall consist of not less than three nor more than five members, all of whom shall be members of the House of Delegates, who shall serve only during the regular or special session for which appointed. Any member of the Association shall have the privilege of appearing before a reference committee on any issue being considered. Additionally, reference committees may permit the appearance of any individual who, in the opinion of the committee, can assist its deliberations.

Chapter VI

ELECTION OF OFFICERS

Section 1. Ballot. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

Section 2. Nominations. The House of Delegates on the first day of the annual session shall select a Committee on Nominations consisting of nine members of the House of Delegates, one from each Association District. It shall be the duty of this committee to consult with the members of the Association and to hold one or more meetings at which the best interests of the Association and of the profession of the state for the ensuing year shall be carefully considered. The committee shall nominate to the House of Delegates three names for each general officer vacancy and two names for all other offices. No two candidates for President-elect may be named from the same county. Nominations for appointment to membership on the Missouri State Board of Health shall be made by the House of Delegates in accordance with Section 7024, Mississippi Code of 1942, provided that six names shall be submitted, three of whom shall be elected and their names submitted to the Governor as nominees from each district, provided no member shall be nominated who has served two consecutive terms. The House of Delegates shall nominate five physicians when vacancies occur on the Board of Trustees of Mental Institutions which nominations shall be submitted to the Governor in accordance with law.

Section 3. Report of Nominations. The House of Delegates shall receive the report of the Committee on Nominations and elect officers, Trustees, and Council members on the last day of the annual session.

Section 4. Nominations from the Floor. Nothing in this Chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

Section 5. Executive Secretary. The Board of Trustees shall select and appoint an Executive Secretary as elsewhere prescribed in the Constitution and By-Laws of the Association.

Chapter VII

DUTIES OF OFFICERS

Section 1. President. The President shall have general supervision over all meetings of the various bodies of the Association, shall appoint all committees not otherwise provided for, shall deliver an annual address at such time and place as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall fill by appointment all vacancies occurring during his tenure of office among the general officers and on the Board of Trustees and Councils and shall be empowered to appoint such committees on an *ad hoc* basis as may be desired or required to conduct the affairs of the Association. He shall be an *ex officio* member of all Councils and committees. He shall be the real and acknowledged head, as well as the personal representative, of the medical profession of the State of Mississippi during his term of office, and insofar as practicable, shall visit by appointment the various sections of the state and the component societies of the Mississippi State Medical Association and assist the Trustees in their tasks of aiding and strengthening the component societies and in making their work more useful.

Section 2. President-elect. The President-elect shall be in charge of the work of organization, including membership, under the direction of the President, and shall exercise these duties and advise with the Vice Presidents and with the Board of Trustees in this phase of their activity. He shall be an *ex-officio* member of all Councils and committees. He shall succeed to the presidency upon the event of the death, resignation, or removal from office of the President. This automatic succession shall not operate to disqualify him from serving the next regular term of office unless he has served more than six months as President.

Section 3. Vice Presidents. The Vice Presidents shall assist the President in the discharge of his duties. They shall further assist the President-elect in the work of organization, including membership in their respective areas, and in promoting the welfare of the Association and the profession of the state.

Section 4. Speaker. A Speaker shall be elected for a term of three years. This officer may be chosen from the membership of the Association, irrespective of any affiliation with the House. The Speaker shall familiarize himself with the rules and usages of parliamentary procedure, with the laws of the House. On him shall devolve the duty of bringing before the House through the various officers and chairmen all reports and other matters that are to receive its attention. He shall preside at all meetings of the House and perform the duties usual to the position and office of chairman except in the appointment of committees, which shall be the privilege of the President.

Section 5. Vice Speaker. A Vice Speaker shall be elected for a term of three years to run concurrently with that of the Speaker. The Vice Speaker shall assist the Speaker in all duties prescribed in these By-Laws.

Section 6. Secretary-Treasurer. The Secretary-Treasurer shall be elected for a term of three years. He shall perform such duties ordinarily devolving on a secretary of a corporation by law, custom, or parliamentary usage and shall enjoy the rights and perform such other duties as may be granted or imposed in the Constitution and these By-Laws. He may delegate such duties as are herein described to the Executive Secretary who shall be responsible therefor. He shall be an *ex-officio* member of all Councils and committees.

Section 7. Executive Secretary. The Executive Secretary shall be appointed by the Board of Trustees and shall serve at the pleasure of the Association. He need not be a member of the Association nor a physician. He shall maintain a Central Office for the Association and shall be responsible for the management and proper functioning of the Central Office to the President of the Association and the Board of Trustees. He shall attend all sessions

and meetings of the Association, the House of Delegates, the Board of Trustees, and shall serve at all times to perform such other duties as may be deemed beneficial to the Association by the President and Board of Trustees. He shall assist elected officers, Councils, committees, and Trustees in the performance of their duties. Under instructions from the President, he shall conduct a comprehensive program of public education and all such other activities as may disclose favorably to the public at large the aims, objectives, and goals of service of the medical profession in Mississippi. He shall, when requested, place himself in position to assist any of the component societies of the Association and he shall attend meetings of the component societies when invited by officers thereof. He shall be made custodian of records, books and papers belonging to the Association and he shall keep account of and promptly place under the supervision of the Secretary-Treasurer such funds as may be delivered into his hands in the name of the Association. He shall give bond at the expense of the Association in such amount as may be required. He shall provide for the registration of the members and delegates at the annual session and cooperate in preparing for and arranging all functions of the Association, including the annual session. He shall procure an exact transcript of all proceedings of the House of Delegates. He shall maintain a register of all legal practitioners in Mississippi and he shall maintain detailed and exact records of the membership with regard to component societies, the Mississippi State Medical Association, and the American Medical Association. He shall issue evidence of membership to each physician who pays the annual assessment and is accepted in the Mississippi State Medical Association. He shall maintain close and complete liaison with the American Medical Association and shall keep the component societies informed of activities, programs, and mandates of both the state Association and the American Medical Association. He shall publish from the Central Office such memoranda, bulletins, and miscellaneous publications as may be directed by the President, the Board of Trustees, and the House of Delegates. He shall conduct the official correspondence of the Association as he may be directed. He shall employ such assistants as may be required, upon authorization of the Board of Trustees. He shall supply each component society with blank forms to be used in connection with membership and reports. He shall maintain records of monies paid by the component societies for assessments and dues. He shall prepare and publish under the direction of the President and Board of Trustees such programs as may be necessary for official functions of the Association. He shall be reimbursed for expenses incurred in the performance of his duties, separately and in addition to his regular compensation.

Chapter VIII

BOARD OF TRUSTEES

Section 1. Board of Trustees. The Board of Trustees shall be the executive and governing body of the Association during vacation of the House of Delegates. It shall consist of nine members, one from each Association District, where terms of office shall be three years and so arranged that only three members are elected annually. A Trustee shall not serve more than three consecutive terms. During vacation, the Board of Trustees shall exercise the powers conferred upon the House of Delegates by the Constitution and these By-Laws, provided that in the exercise of these powers thus conferred, the Board of Trustees shall neither consider nor act to contravene any action, mandate, or policy of the House of Delegates which may still be in effect.

Section 2. Officers of the Board. The Board of Trustees shall elect from its membership a Chairman, a Vice

Chairman, and a Secretary for terms of one year during the last day of the annual session following adjournment of the House of Delegates. These officers of the Board shall compose its Executive Committee. The duties of the Secretary may be delegated to the Executive Secretary who shall maintain such special records and transcripts of meetings as the Board may desire.

Section 3. Meetings of the Board. The Board of Trustees shall meet daily during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of any three members of the Board.

Section 4. Executive Committee. The Executive Committee of the Board of Trustees shall be empowered to act in behalf of the Board on all matters delegated to it by majority vote of the Board. The acts of the Executive Committee, however, shall be subject to confirmation by the Board.

Section 5. Reports of the Board of Trustees. The Board of Trustees shall make an annual report to the House of Delegates and such supplemental reports as necessity may require at a time designated in the regular transaction of the business of the House. The report shall be made by the Chairman, the Vice Chairman, the Secretary, or the Executive Secretary. The reports of the Board shall be made a portion of the annual transactions and proceedings of the Association.

Section 6. Duties of Trustees. Each Trustee shall be organizer and arbiter for his Association District. He shall visit the component medical societies within his District during each year and shall make an annual report of his activities and of the condition of the medical profession of each county of his District. Each Trustee shall be reimbursed for expenses incurred by him in traveling within his District or attending special meetings in the performance of his official duties, which will be allowed upon presentation of an itemized and documented account. This provision shall not be construed to include his expenses in attending the annual session of the Association.

Section 7. Public Policy. The Board of Trustees shall have the right to communicate the views of the medical profession and of the Association in the State of Mississippi with regard to matters of medical science, health, sanitation, and allied spheres of activity. It shall approve all memorials and resolutions issued but shall not issue memorials and resolutions heretofore prohibited in these By-Laws.

Section 8. Association Districts. The State of Mississippi shall be subdivided into Association Districts by counties, provided that all counties in a component society shall be in one Association District. These districts are defined as follows:

- District 1: Bolivar, Coahoma, Humphreys, Leflore, Quitman, Sunflower, Tallahatchie, Tunica, and Washington.
- District 2: Benton, DeSoto, Lafayette, Marshall, Panola, Tate, Tippah, Union, and Yalobusha.
- District 3: Alcorn, Calhoun, Chickasaw, Clay, Itawamba, Lee, Lowndes, Monroe, Noxubee, Oktibbeha, Pontotoc, Prentiss, and Tishomingo.
- District 4: Attala, Carroll, Choctaw, Grenada, Holmes, Montgomery, and Webster.
- District 5: Hinds, Issaquena, Leake, Madison, Rankin, Scott, Sharkey, Simpson, Smith, Warren, and Yazoo.
- District 6: Clark, Kemper, Lauderdale, Neshoba, Newton, and Winston.
- District 7: Covington, Forrest, George, Greene, Jasper, Jefferson Davis, Jones, Lamar, Marion, Pearl River, Perry, and Wayne.
- District 8: Adams, Amite, Claiborne, Copiah, Franklin, Jefferson, Lawrence, Lincoln, Pike, Walthall, and Wilkinson.
- District 9: Hancock, Harrison, Jackson, and Stone.

Chapter IX COUNCILS

Section 1. Councils. Councils of the Association shall be elected standing bodies of the House of Delegates, responsible thereto. There shall be a Council on Medical Service, a Council on Scientific Assembly, a Judicial Council, a Council on Constitution and By-Laws, a Council on Legislation, a Council on Budget and Finance, an Editorial Council, and a Council on Medical Education. A Council member shall not serve more than three consecutive terms.

Section 2. Council on Medical Service. The Council on Medical Service shall be charged with the responsibilities of ascertaining and studying all aspects of medical care in Mississippi. It shall examine and make available all facts, data, and opinion on timely and adequate medical care. It shall investigate social and economic aspects of medical care and report its evaluations and findings. It shall suggest means of distribution of adequate quality medical service to the public consistent with the policies of the Association. It shall act as a factfinding and advisory body of the Association. Under its jurisdictions, there shall be assigned the activities of the Association in medical service, emergency service programs, indigent care, and allied medical agencies. There shall be one member from each Association District elected for a term of three years and so arranged that only three members shall be elected for full terms each year. The Council on Medical Service shall appoint Committees on Occupational Health, Maternal and Child Care, Mental Health, and Blood and Blood Banking. Each committee shall consist of not less than five nor more than seven members appointed for periods of not less than one nor more than three years.

Section 3. Council on Scientific Assembly. The Council on Scientific Assembly shall be composed of the Secretary-Treasurer and the chairman and secretaries of the several scientific sections. The Secretary-Treasurer shall be chairman of the Council. Upon this Council shall devolve the duties and responsibilities of planning the annual session to include all scientific activity and the programming and scheduling of annual session events. The Council shall be empowered to appoint such committees for terms not to exceed one year as may be necessary to assist in the discharge of these duties.

Section 4. Judicial Council. The Judicial Council shall consist of nine members elected for terms of three years each, one from each Association District. The judicial powers of the Association shall be vested in this Council whose decision shall be final. The Council shall have jurisdiction in all questions involving membership in the Association, all controversies arising under the Constitution and these By-Laws, interpretation and application of the Principles of Medical Ethics of the American Medical Association, controversies between two or more component societies of the Association and among members of the Association. The Council shall have appellate jurisdiction in questions and controversies referred to the state Association by appropriate and authorized bodies of component medical societies. Appeals shall be perfected within six months following the date of decision by the constituted authority of the component society. The Council, under these several authorities, may conduct such hearings as may be necessary and after due and legal processes may, by majority opinion, censure, suspend, or expel any member for infraction of the Constitution or these By-Laws.

Section 5. Council on Constitution and By-Laws. The Council on Constitution and By-Laws shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be referred all suggested amendments and changes in the Constitution and By-Laws of the Association for recom-

mendation to the Board of Trustees and House of Delegates.

Section 6. Council on Legislation. The Council on Legislation shall consist of nine members, one from each association district, elected by the House of Delegates for terms of three years each which are so arranged that three members are elected annually. This Council shall analyze proposed legislation, recommending to the Board of Trustees courses of action for securing laws in the interests of public health, scientific medicine, as well as medical practice. It shall study and report the need for new and remedial legislation designed to serve the best interests of the state and nation. This Council shall be responsible to the Board of Trustees.

Section 7. Council on Budget and Finance. The Council on Budget and Finance shall consist of five members elected by the House of Delegates for terms of three years each which are so arranged that not more than two members shall be elected annually. This Council shall receive reports of the finances of the Association and to it shall be referred all matters pertaining to the annual budget. The Council shall report annually to the House of Delegates, making specific recommendations on the annual budget of the Association. This Council shall be responsible to the Board of Trustees.

Section 8. Editorial Council. The Editorial Council shall consist of the Editor and the Associate Editors, elected by the House of Delegates to serve two years, and the former shall serve as chairman. To this Council shall be referred all reports of scientific subjects and all scientific papers and discussions presented before the Association and its component societies. The Council shall consider for publication in the official organ of the Association such papers, reports, and other data as may serve to further and advance scientific medicine in Mississippi. It shall exercise editorial authority over the official organ of the Association. This Council shall be responsible to the Board of Trustees.

Section 9. Council on Medical Education. The Council on Medical Education shall consist of three members elected by the House of Delegates for terms of three years each. To this Council shall be assigned the responsibilities of encouraging undergraduate and postgraduate study of medicine, licensure, and facilities for medical education in the state. This Council shall be responsible to the Board of Trustees.

Chapter X COMMITTEES OF THE BOARD OF TRUSTEES

Section 1. Committees of the Board of Trustees. Standing committees of the Board of Trustees shall consist of the Advisory Committee to the Medical Auxiliary, Peer Review Committee, the Committee on Publications, and the Committee on Medicine and Religion. All committees of the Board of Trustees shall be appointed by the Board for terms specified unless their selection is otherwise prescribed.

Section 2. Advisory Committee to the Medical Auxiliary. The Advisory Committee to the Medical Auxiliary shall consist of three members appointed for terms of three years each. The committee shall be charged with the responsibility of advising the Woman's Auxiliary to the Mississippi State Medical Association on matters of organization and program activity relating to the supportive role of the Auxiliary in its work with the Association.

Section 3. Peer Review. The Committee on Peer Review shall consist of nine members, one from each Association district, appointed for terms of three years each so as to provide for appointment of three members annually. Members of this committee shall not simultaneously serve on any disciplinary body of the Association or its component medical societies. To this committee shall be assigned the work of peer review, including but

not limited to resolution of differences between patient and physician, review of the quality of medical care, adequacy and/or reasonableness of fees, whether due or paid from private or public sources, utilization of health care resources, and liaison with private and public sources of medical care financing. The committee is empowered to encourage a response from any member of the Association in writing or by personal appearance, authority to initiate investigations on its own motion, and authority to file charges against a member in the name of the committee before the Judicial Council or a disciplinary body of a component medical society. Under no circumstances, however, shall the Committee on Peer Review exercise any disciplinary function nor shall it be empowered to alter the status or standing of any member. The committee shall be empowered to prescribe its rules of operation which shall not be in conflict with the policies or By-Laws of the Association. The committee shall also encourage and assist component medical societies in forming Committees on Peer Review at the local level.

Section 4. Committee on Publications. The Committee on Publications shall consist of six members. These shall consist of the Editor, the two Associate Editors, and three others, the three latter being appointed by the Board of Trustees for terms of three years which are so arranged to provide for appointment of one such member annually. The chairman of the committee shall be designated by the Board. The committee shall implement instructions and policies of the Board of Trustees relating to the official Journal of the Association. Additionally, the committee shall study and recommend to the Board policy proposals relating to organization and production of the Journal, reporting annually its deliberations.

Section 5. Committee on Medicine and Religion. The Committee on Medicine and Religion shall consist of six members appointed for terms of three years each and so arranged to provide for appointment of two members annually. The committee shall be responsible for formulating a program in the field of medicine and religion and for carrying out such assignments as may be made in this connection by the Board of Trustees.

Chapter XI RULES AND CONDUCT

The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XII COMPONENT SOCIETIES

Section 1. Component Societies. All component societies now in affiliation with this Association or those that may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall, upon application to the Board of Trustees and approval by the House of Delegates, receive a charter from and become a component part of this Association. The Board of Trustees and House of Delegates, on recommendation by the Judicial Council, shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and spirit of this Constitution and By-Laws.

Section 2. Number of Societies. Only one component medical society shall be chartered in any county but nothing in this section shall be construed as to prohibit unofficial organization of medical clubs or other county level groups of physicians whose purpose it is to further and advance scientific medicine and postgraduate medical education.

Section 3. Members of Societies. Each component society shall judge the qualifications of its own members, but as such societies are the only portals to this Association and to the American Medical As-

sociation, every reputable and legally registered physician who is qualified under Chapter I, Section 1, of these By-Laws shall be eligible for election to membership. Before a charter is issued to any component society, full and ample opportunity shall be given to every such physician in the county to become a member.

Section 4. Right of Appeal. Any physician who may feel aggrieved by the action of the society of his county or District in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Judicial Council, which, upon a majority vote, may permit him to petition for membership in an adjacent society.

Section 5. Evidence of Appeals. In hearing appeals, the Judicial Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, efforts at a conciliation and compromise shall precede all such hearings.

Section 6. Area Jurisdiction. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Section 7. Professional Authority. Each component society shall have general direction of the affairs of the profession in its jurisdiction and shall constantly use its influence to the moral and professional betterment of its physicians, to the end that the membership shall embrace every qualified physician in its jurisdiction.

Section 8. Meetings. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall especially be encouraged to do postgraduate work, and to give the society first benefit of such labors. Official positions and other preferments shall be unstintingly given to such members.

Section 9. Delegates. Each county shall be entitled to representation in the House of Delegates of this Association, one delegate for each fifty members or fraction thereof. Delegates shall be elected for terms of not less than two years and societies shall report such elections to the Executive Secretary of the Association in no event later than thirty days before the annual session.

Section 10. Duties of Component Society Secretaries. The secretary of each component medical society shall perform such duties as are usual and customary to his office. He shall maintain the official roll of membership for his society, shall collect dues and assessments, and shall make official reports as elsewhere prescribed in these By-Laws to the Association, transmitting dues in behalf of component society members. He shall conduct the official correspondence of his component medical society.

Chapter XIII FISCAL YEAR

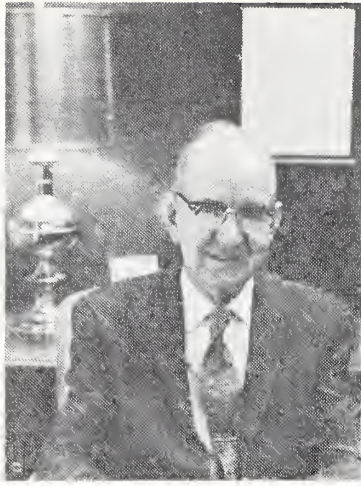
The fiscal year of the Association and its component county societies shall begin January 1 each year and end on December 31 following, but membership in the state Association shall not lapse until April 1 of that year.

Chapter XIV AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the delegates present at that session, after the amendment has laid upon the table for one day.

Chapter XV REPEALING AUTHORITY

Upon adoption of these By-Laws, all previous By-Laws, motions of record, mandates, policies, rules and regulations in conflict therewith are hereby repealed, except that officers elected to serve in the Association and its component societies shall continue their incumbency until the completion of their previously prescribed terms and their successors elected under the current By-Laws.



The President Speaking

'The Making of an M.D.'

PAUL B. BRUMBY, M.D.

Lexington, Mississippi

THE SUMMER MONTHS are a happy time in many American families. This is the season of weddings and graduations. There is a great thrill in watching little rascals in caps and gowns receiving diplomas that signify that they are mature enough to begin real school. The senior recitals and senior parties are all part of our educational system.

The fascinating thing to me is that somewhere in these years the heart of a doctor is made. A great many follow in their father's footsteps; others have physicians in their family background; and still others are encouraged by doctors that they know, love and respect. The picture, *The King's Physician*, which hangs in many physicians' offices, has caused many serious-minded youths to think of serving others with untiring devotion.

I believe that we doctors should address ourselves to finding and encouraging high-type youths to go into the field of medicine. The lad across the street may have the potential of a great physician.

We see the statement over and over that those who enter the field of medicine do so because of remuneration to be gained. Nothing could be farther from the truth. No promise of future compensation could sustain an ambitious youth through the many years required before he can sell his services in the health market. He sees his fellow graduates who enter other fields forging steadily ahead. Among nine physicians who met recently, none thought that economic factors were even high on the list of future expectations of medical graduates. In fact, they felt that somewhere in his training, the physician should have access to more knowledge of the economics of medical practice.

Any student who has intellectual ability, self-discipline, and unflagging ambition will make a success in any endeavor which he undertakes. He owes no apology for success. The repeated assertions seen in the press and heard repeatedly, that the members of our profession are interested solely in pecuniary gain, are infuriating. ★★★



Medicare's Part C: Danger, Dichotomy, Anathema

I

HEALTH CARE DELIVERY by capitation payment is the new thrust under Medicare, and if enacted by the Congress, it could be the pivotal aspect of the most drastic change yet wrought by a decade of government in medicine. This is no fantasy, but it is hard legislation already enacted by the House of Representatives. It is the little-known Part C of Medicare, now facing final action in the Senate.

Part C, in a nutshell, provides for care delivery by a health maintenance organization, popularly designated an HMO. This is simply another description for prepaid group practice care, closed panel care to most of us; for a medical care foundation; or for a nonprofit or profit corporation. It departs substantially from the traditional private, fee-for-service delivery system, and the greatest danger implicit in the proposal is its untried, untested, and undocumented status.

Part C entered the Medicare scene abruptly and reportedly without prior knowledge even of the government's number one M.D., Dr. Roger Egeberg. During final hours of hearings on the Social Security Amendments of 1970, HEW Undersecretary John G. Veneman made the proposal in executive session before the House Committee on Ways and Means. It is believed that

Committee Chairman Wilbur Mills was cool toward it but agreed, in the face of pressure from his colleagues, to permit experimentation with the idea.

In any event, the proposal found its way into the bill which many congressmen voted for without knowing it was there. If anything, Part C could exert the most profound impact upon medical practice of any facet of the public financing mechanism yet enacted.

II

Part C of Medicare has its roots in economy. This is to say that the government wants the same and more medical care it now purchases for less outlay of money. Incredible? Not at all, for Secretary Robert H. Finch followed up Undersecretary Veneman by only a couple of days and said so.

Its provisions make many assumptions, seek ideals not readily attainable, and asks for more services for the same or less money. The measure would permit HEW to make contracts with health maintenance organizations—HMO's—and make per capita payments to them for services to Medicare beneficiaries. In lieu of Part A (hospitals, home health agencies, and extended care facilities) and Part B (payments for physicians' ser-

EDITORIALS / Continued

vices and those of allied professionals), the Secretary of HEW would be authorized to determine a combined Part A and Part B per capita rate for payment, on a prospective basis, for services provided by an HMO. Medicare beneficiaries entitled to services under Parts A and B could elect to enroll in an HMO.

The HMO would be required to have at least half of its members under age 65 and, therefore, ineligible for Medicare, and it could receive no more than 95 per cent of amounts otherwise paid under fee-for-service. For Part B services only, the HMO could receive "two times the product of the number of Medicare enrollees and the monthly Part B 'premium' established by the Secretary." This simply means the \$10.60 per month, half of which is paid by (or in behalf of) the beneficiary and half by the government itself. Part A would pay the rest.

The HMO may be a public or private organization, nonprofit or for-profit, which:

- Provides directly or through arrangements with other health services on a per capita basis.

- Provides Medicare beneficiaries all of the services and benefits under Parts A and B.

- Provides physicians' services through employed physicians, partners, or groups who would be reimbursed for services on a per capita basis for enrollees.

- Demonstrates to the satisfaction of the Secretary proof of financial responsibility and capability to furnish comprehensive health services, including institutional services—efficiently, effectively, and economically.

- Has enrolled members at least half of whom are under age 65.

- Assures prompt services with review of quality standards.

- Opens enrollment at least every two years and accepts eligible Medicare applicants without underwriting on a first-come, first-served basis up to the limit of its capacity, unless such would result in more than half the enrollees being over age 65.

Beneficiaries could receive extra emergency services when unable to go to the HMO. The enrollment fee charged the applicant could not exceed the present cost sharing provisions of Parts A and B, meaning the \$50 deductible and 20 per cent co-pay.

III

American medicine had little or no time to react or respond to the Veneman proposal between

its initial presentation in executive session and the reporting of the bill by the House Committee on Ways and Means. While sensing the dangers of the new part, AMA and most state medical associations hold to the position that the delivery system should be pluralistic, not monolithic. Since Part A and B are still very much with us, the new Part C is merely a variation.

But principally, AMA did make a valid point in stating that full, free choice of physician—and hence, free choice of financing mechanism, as the law presently stands—is utterly necessary. AMA objected to the enactment of Part C without discussion and testimony, let alone cost and actuarial data which could have been gleaned from a pilot program, such as has been underway with the Health Insurance Plan of New York, the major eastern closed panel delivery program.

Secretary Finch, speaking in support of Part C, said that "the federal government is spending over \$10 billion this year to buy health care for the aged and poor . . . (and) we are not getting our money's worth. . . ." This seems to prove a point which the government has yet to learn: Costs for any program are eventually three to five times greater than program proponents say they will be. Why would Part C be any different



"One of them is my nurse—the rest fill out the Medicare forms."

than Part A or Part B when the bills are totaled up? Moreover, it is highly unlikely that anybody, the government or whoever, can buy more and pay less in today's marketplace.

Then, there is another major impediment to universal application of Part C, even if passed on final consideration by the Senate. Twenty-one states have laws which impair prepaid group practice or closed panel delivery. Mississippi is not in this group.

HEW has a blood-chilling answer for this: Change the state laws, or we will apply "economic leverage" with Title XIX and Title V (maternal and child care) funds. AMA has characterized this action as "unconscionable," and we add a hearty amen. To reduce or discontinue funds for two separate medical programs, enacted long before Part C became HEW's bright idea, is to make a mockery of the initial purpose of the affected programs. Moreover, such state laws, which the people had a perfectly legal right to enact, were not aimed or directly related toward any proposal now being considered.

IV

There is a strange dichotomy about Part C which places some state medical associations between a rock and a hard place. Less than a decade ago, a number of medical associations organized health care foundations to bargain with state welfare programs for physicians' services or at least guarantee equity in assuring medical services. California has been a fountainhead for foundations, which, incidentally, brought peer review into its own.

Now the foundations are in an enviable position—if the cash is sufficient—to snatch Medicare away from the Blues and commercial carriers under a law actually aimed at reducing care costs. And as the law is presently written, the Blue plans and insurance companies would have no recourse. The medical society foundation merely qualifies as an HMO, and the beneficiary elects to enroll. Exit the Blue plans and commercial carriers summarily and without fanfare.

But there are also permissive provisions under the proposal to permit for-profit corporations to qualify as HMO's. Enter here professional corporations, also an anathema to the Blues and insurers. Nor is this the end of the story, because the House Committee on Ways and Means stated in its favorable report on the measure that "your committee notes that there is sufficient authority in the present Medicaid program to permit states to arrange for Medicaid coverage through a

Health Maintenance Organization. It would continue to be necessary, as required under present law, to guarantee Medicaid eligibles freedom of choice of health providers."

But let none see a pot of gold at the end of this rainbow just to sate an unwholesome appetite in the delivery of care. It is axiomatic that the only way to earn money under Part C as now written is to deliver less care, and this likely would not be in the interest of the patient. Given a choice, it is odds-on that few Medicare beneficiaries would choose HMO services over those of a private physician except in areas where prepaid group practice with affiliated hospitals already abound.

The impact of the proposal is therefore difficult to assess, although it portends to be massive. We have problems enough with Medicare and Medicaid and little need to invite more and bigger ones. In the final analysis, worthy, working peer review and the private delivery system are the measures of choice in public financing of care for all patients. Making private delivery continue to do the job is really the way to stop once and for all the alphabetizing of the law.—R.B.K.

State Legislation Is Everybody's Crisis

In his presidential address at the 102nd Annual Session, Dr. James L. Royals reminded us how Mississippi medicine moved from one legislative crisis to another during two sessions of the solons in 1969-70. From legislative clearinghouse reports, other states have this problem, too, with all sorts of pro and con overtones.

Hawaii and Maryland are faced with bills requiring compulsory areawide planning of hospitals and medical facilities, and a Florida proposal would give a physician tenure as a hospital staff member after a year, thereby denying his peers control over his actions.

If bills in Arizona, California, Georgia, Michigan, New Hampshire, New York, Pennsylvania, and Virginia are successful, hypodermic syringes will be Rx only with almost as much paperwork as a Medicare claim. Hawaii's lawmakers propose to guarantee physicians practicing in remote islands an annual income of \$36,000, but the mid-Pacific state would also tie a lot of strings on them.

Alaska is including abortion in Medicaid, while Florida has three bills permitting abortion

in the absence of any medical indication. California's legislature will vote on a measure to prohibit activities of commercial blood banks.

In Ohio, a bill now pending would prohibit appearance of a physician as an expert witness unless all parties to the case were previously furnished all medical reports pertaining to the matter at litigation. Florida is looking at a huge appropriation measure for a new state school of osteopathy, while California is considering requirements for licensure of professional service representatives of pharmaceutical manufacturers.

Massachusetts is trying to make physicians write the generic as well as the brand name on prescriptions. Florida may make insurance carriers and voluntary prepayment sources compensate podiatrists for surgery. Administration of methadone may become mandatorily reportable in California.

Pennsylvania has a lulu in a bill which would permit the state to approve the number of physicians working in a hospital, approve accounting procedures under which physicians with hospital-oriented practices are compensated, and require financial reports from the hospitals and physicians.

South Dakota is about to require inclusion of chiropractic benefits in health insurance, and Kentucky is bringing optometrists into Medicaid.

Most patently bad laws before state legislatures do not pass, while many good laws are enacted. But the sum total of the picture is the massive commitment which a state medical association must make to legislative programs in manpower, time, and money.

They dare not do less, because it takes only one really bad enactment to exert a tremendously adverse impact on medical care and those who provide it. At the national level on Capitol Hill, AMA is faced with the same problem on a day-to-day basis.

The Mississippi State Medical Association, moving from crisis to crisis in the Extraordinary Session of 1969 and the 1970 Regular Session, has acted decisively to beef up its own program with improved communications and commitments from physicians to work with their senators and representatives. One-fourth of the dues increase voted by the 102nd Annual Session is earmarked for this purpose.

In legislation, what is past is not necessarily prologue, because every day of a legislative session is a new ball game. The urgency of physician participation in state legislation cannot be

overemphasized. Indifference is our worst enemy and literally a vote against the goals and objectives of care delivery under our traditional private system.

Let's get ready for the 1971 Regular Session now.—R.B.K.

CCS Goes to State Board of Health

On July 1, the state of Mississippi will unite into the health care area a formerly fragmented state agency, as the Crippled Children's Service is transferred from the State Department of Education to the State Board of Health. This action comes about as a result of an enactment by the 1970 Regular Session of the Legislature which the state medical association supported.

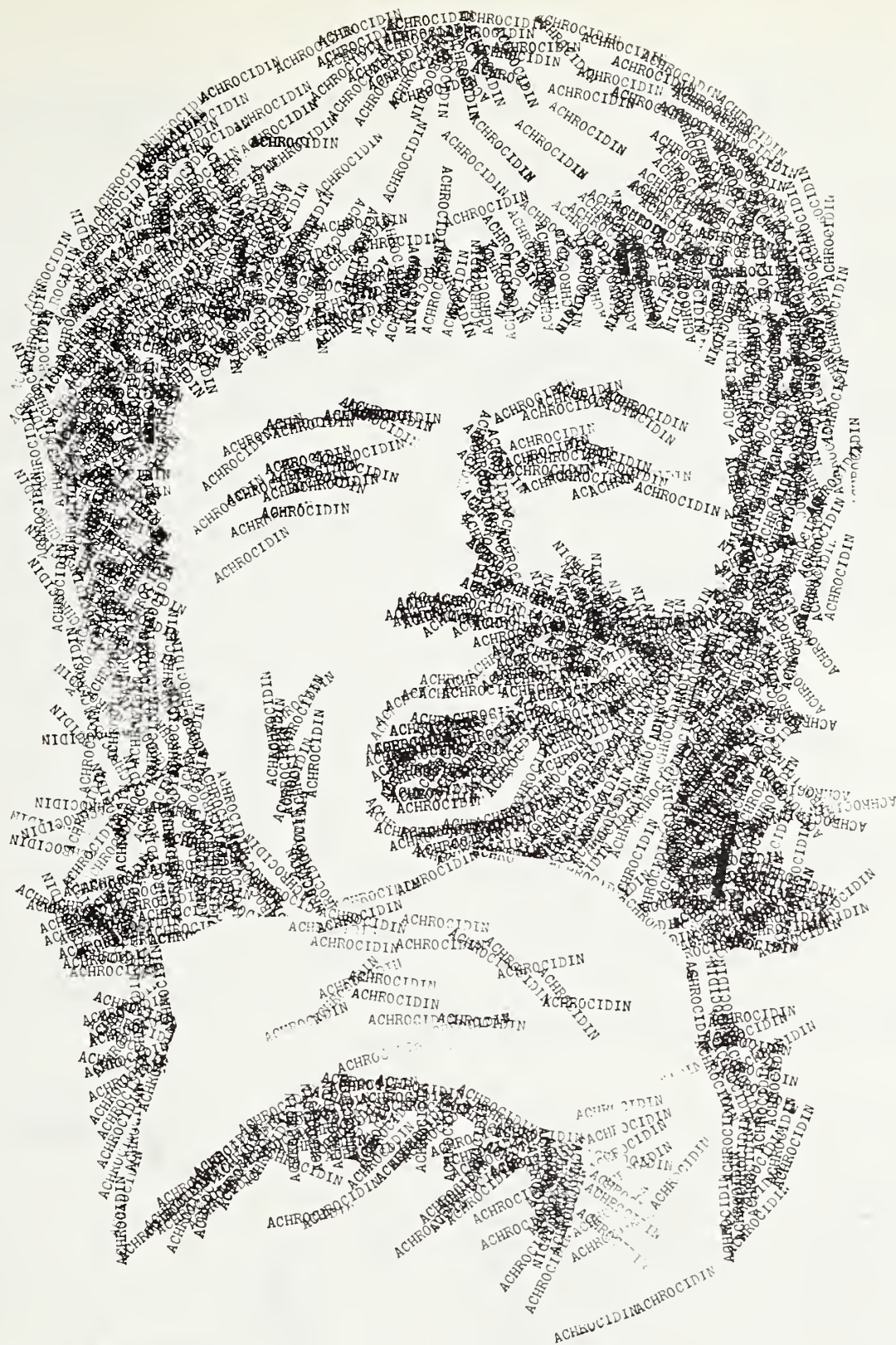
CCS was organized in Mississippi in 1936 as an activity of the Vocational Rehabilitation Division, and it has performed well in the delivery of remedial care to children. The \$1 million program is largely federally assisted, and at present, there are about 20,000 children on its rolls of eligible beneficiaries. In 1969, the service recorded about 5,500 active cases of eligibles who range from the newborn to age 21.

The medical director of CCS is the respected Jackson orthopaedic surgeon, Dr. Thomas H. Blake, and the administrative director is Mr. W. P. Bobo. They are assisted by a 19-member staff which includes one nurse. Traditionally, the State Board of Health has worked with the program, especially in furnishing visiting public health nursing service. These nurses have been alert in case finding and referrals, as well as in post-service follow up visits.

The service conducts clinics regularly at Jackson, Clarksdale, Columbus, Tupelo, Greenwood, Greenville, Vicksburg, Natchez, Gulfport, Pascagoula, Laurel, Meridian, and Memphis. Other clinics are conducted in other Mississippi communities as necessity requires. Clinics are generally oriented to orthopaedic, neurological, urological, and surgical conditions. Special emphasis has been placed on conditions amenable to cardiac surgery, and some evaluation for epilepsy is included.

The primary source of federal funds is the U. S. Children's Bureau with some 50-50 matching and some federal assistance requiring no state matching. The 1971 fiscal year budget, as provided by the Legislature, is about \$1.25 million.

In studies by bodies of the association and in the major research effort last year, "Information



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ACHROCIDIN Tetracycline HCl—Antihistamine—Analgesic Compound Tablets and Syrup are recommended for the treatment of tetracycline-sensitive bacterial infection which may complicate vasomotor rhinitis, sinusitis and other allergic diseases of the upper respiratory tract, and for the concomitant symptomatic relief of headache and nasal congestion. For children and elderly patients you may prefer caffeine-free **ACHROCIDIN Syrup**. Each 5 cc contains: **ACHROMYCIN** Tetracycline equivalent to tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastrointestinal distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons

on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculo-

popular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.



Systems for Comprehensive Health Planning," the state medical association has taken the position that many health services for the needy are unnecessarily separated from primary health-oriented agencies of the state. This remains true today, although the CCS transfer is a logical beginning step to correct this long-standing separation and fragmentation. The legislation effecting the change had the support of the Department of Education and the State Board of Health.

As we move closer to the goals of coordinating this and similar activities with Medicaid, let us seek further sensible and reasonable steps to deliver care under the aegis of our own state without duplication of effort and expenditure of public funds.—R.B.K.

Hellzapoppin' on Drug Abuse Bills

Olsen and Johnson, the celebrated comedy combination of the 1930's, had a famous routine about baseball with "who's on first?" The 2nd Session of the 91st Congress is little better off when it comes to the monumental mixup on drug abuse legislation. Except they seem to have two runners on first base with both claiming the right to be there.

Just about everybody agrees that new laws are needed to combat drug abuse. The major differences are how it shall be done and whether the hard liners or liberals shall prevail. Last year, a senate subcommittee under Sen. Thomas Dodd (D.,Conn.) conducted hearings, drew a bill, got it passed in the Senate, and sent it to over to the House. There, it languishes on the desk of the aging speaker, John McCormick, gathering dust.

The Dodd bill, S. 3246, resembles a measure put up by the Nixon administration, generally described as the hard line against drug abusers. Both contain the "no knock" provision permitting search when law enforcement officers have reason to believe that violations are occurring in areas normally requiring a search warrant for entry.

But worse yet, both measures permit the Department of Justice to rule—over the recommendations of health-oriented agencies and physicians—what drugs may be included in "abuse categories."

Meanwhile, this psychotic Eve of the mysteri-

ously wonderful world of legislation, has a third face. Rep. Paul Rogers (D.,Fla.) has conducted hearings on the House side and come up with a compromise drug abuse bill. In his hearings, Rep. Rogers took note of scientific and legal witnesses who testified against Sen. Dodd's and the administration's "no knock" provisions. Whereupon Sen. Dodd, fighting for his political life in a reelection campaign, immediately charged that the scientists were under HEW pressure to testify as they did on pain of losing lucrative research grants.

The liberal House Judiciary Committee opposes the "no knock" provision which the Senate has adopted. But the frosting on the cake came a couple of weeks ago when Chairman Wilbur Mills (D.,Ark.) of the potent Ways and Means Committee introduced a fourth version which not only picks up the provisions of the house-ignored Senate measure by Sen. Dodd but also contains some revenue-producing provisions. Under congressional rules, this measure may be brought to the House floor under a gag rule and limited debate.

Now, the vendetta is Justice against HEW in the executive branch of government, committee against committee in the House, soft liners versus hard liners on every side, and a parliamentary confusion likely to tax Robert and every edition of his *Rules of Order*. In the meanwhile, the nation needs new drug abuse legislation and faces a



"Well, so much for its use as a mouthwash."

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*Among persons 20% or more overweight as compared with median weight for persons of like height and sex.

1. Kannel, W.B., et al.: *Circulation* 35:734, 1967.
2. Thomas, H.E., Jr., et al.: *Med. Times* 95:1099, 1967.
3. Albrink, M.J., in: Beeson, P.B. & McDermott, W. (eds.): *Cecil-Loeb Textbook of Medicine*, ed. 12, Phila.: W.B. Saunders Co., 1967.

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Contraindications: Severe coronary artery disease, hyperthyroidism, severe hypertension, nervous instability, and agitated prepsychotic states. Do not use with other CNS stimulants, including MAO inhibitors.

Warning: Do not use during the first trimester of pregnancy unless potential benefits outweigh possible risks. There have been clinical reports of congenital malformation, but causal relationship has not been proved. Animal teratogenic studies have been inconclusive.

Precautions: Use with caution in moderate hypertension and cardiac decompensation. Cases

involving abuse of or dependence on phenmetrazine hydrochloride have been reported. In general, these cases were characterized by excessive consumption of the drug for its central stimulant effect, and have resulted in a psychotic illness manifested by restlessness, mood or behavior changes, hallucinations or delusions. Do not exceed recommended dosage.

Adverse Reactions: Dryness or unpleasant taste in the mouth, urticaria, overstimulation, insomnia, urinary frequency or nocturia, dizziness, nausea, or headache.

Dosage: One 25 mg. tablet b.i.d. or t.i.d. Or one 75 mg. Endurets tablet a day, taken by mid-morning.

Availability: Pink, square, scored tablets of 25 mg. for b.i.d. or t.i.d. administration, in bottles of 100 and 1000.

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serious situation with the Supreme Court's having softened up many of the laws already on the books.

The experts on Capitol Hill are quietly laying odds on Mills who has the advantages of House rules on his side and the *fait accompli* Dodd measure through the Senate. Were it not so serious and urgent, this comedy of legislative error and false pride would make humorous reading. But with the nation consuming stimulant and depressant drugs about 1,000 per cent in excess of maximum medical need, nobody with an ounce of perspective and awareness of the problem is laughing.—R.B.K.

Aspirin on Rx? Some Say Yes!

A major U. S. industry—that of manufacturing aspirin—ought to be shaking in its boots. If it takes literally the warning and admonitions of Dr. Richard S. Farr, immediate past president of the American Academy of Allergy, the aspirin makers may have thoughts of substantially reduced sales.

Dr. Farr, chief of allergy and clinical immunology at Denver's National Jewish Hospital, says that aspirin ought to be a prescription drug. He says that his position is supported by the clinical side effects of the world's most popular and frequently used pill, and he says that laboratory findings solidly support the capability of aspirin of acetylating a wide variety of body substances. He reports having observed aspirin intolerance in 20 per cent of his patients.

The United States turns out 30 tons of aspirin each working day. Assuming a huge export market, this still adds up to a wallop of tablets for the pill-consuming public. We are all too acutely aware that a substantial number of deaths, particularly children, are caused each year by aspirin poisoning through overdosage.

While the Food and Drug Administration goes over the deep end to require package insert warnings for oral contraceptives which are not usually prescribed prior to careful evaluation of the patient, it appears to let us ingest tons of other drugs with potentially dangerous consequences. Maybe we should not put aspirin on a prescription basis, but the views of this clinician seem to underscore how penny wise and pound foolish we can be with drugs.—R.B.K.

Homicide Increases in the United States

Death inflicted upon an individual at the hand of another, homicide, is on the increase in the United States. The medical implications in this most revolting of all human behavioral patterns are clear: Many reasons for the unnatural act proceed from medical conditions, and for every successful homicide, there are many which are unsuccessful, leaving critical injuries to be treated.

The man-killing-man rate in our nation is up 50 per cent over 1950 in the short span of 20 years, and much is being said and studied over it. Yet, the rate, estimated by the experts to be about 7.0 per 100,000, is significantly lower than it was in 1920 through the early 1930's. Then, it stood at 8.3 per 100,000 and mounted until it peaked at 10.0 per 100,000 in 1933, the most violent year for killings—on a pure statistical basis—in our history.

Homicide rates, according to actuaries for the Metropolitan Life Insurance Co. who have made extensive analyses of killings, vary markedly by race, sex, and age. For example, deaths among white females, traditionally the lowest, is at a 50-year high point.

In the past 10 years, the greatest increase, however, has been among white males, up by 75 per cent. The rate for nonwhite males surged ahead about 40 per cent and for nonwhite females, about 30 per cent. For white females, it zoomed ahead by 46 per cent.

The race ratio in homicide currently shows that the rate for nonwhite males is nine times that of the white rate. For nonwhite females, it is six times that for white women. The age range in which the greatest number of killings occur is 25-34, but the greatest increases are among infants and the elderly.

Behavioral scientists say that the reasons for increase in the homicide rate are complex and not easily explained or understood. Statistically, rates rise after a war, as in the case of World War I with the 1920's, after World War II in 1946, and after the Korean War in 1952 when the curve took an upward swing. Presumably, the sharp upswing now noted results to some extent from the involvement in Viet Nam.

There is a parallel today with the high of the 1920's in defiance of established authority, and a disproportionate share of crime is committed by the young and uprooted poor. The experts also assert that weakening of traditional disciplines

contribute to the delinquency of the young, with the most extreme expression being homicide.

Annual crime reports published by the Federal Bureau of Investigation place Mississippi last or near last in homicides, and this is one time it's great to be last. The statistics are of interest to physicians who must see the consequences of man's turning on man and who frequently can diagnose underlying conditions capable of exploding into this ultimate form of violence.—R.B.K.



PERSONALS

GEORGE LACEY BILES of Sumner, A. V. BEACHAM of Magnolia, and NELSON O. TYRONE of Prentiss have been re-elected to active membership in the American Academy of General Practice, upon completing 150 hours of accredited postgraduate study.

P. TEMPLE CARNEY of Meridian announces the opening of his new office at 1411-22nd Avenue, directly across from Anderson Hospital Emergency Room. Dr. Carney is a family physician.

DAWSON B. CONERLY, JR., of Hattiesburg has been elected president of the Mississippi chapter, American College of Surgeons.

RALPH J. CRISS, JR., of Coffeeville has moved his office to the Coffeeville Clinic.

C. E. EASTERLY and M. A. TAQUINO of Biloxi have moved their offices to 1210 W. Division.

W. R. EURE and Mrs. Eure of Bay Springs recently won the sweepstakes in the exhibit of the Central Mississippi Rose Society in Jackson. The Eures have grown roses as a hobby for five years.

CHARLES A. HOLLINGSHEAD, formerly of Ellisville, has moved his practice and residence to Laurel. His new office will be located in the Medical Arts Building, 1203 Jefferson Street.

LOUIS H. JOBE, retired Army hospital commander, has been appointed health director of Harrison County and the Biloxi-Gulfport area.

NANCY L. KLIESCH announces the opening of her office for the practice of pediatrics and pediatric cardiology at 500 A East Woodrow Wilson in Jackson.

V. E. LANDRY of Lucedale announces the new location of his Family, Medical & Surgical Clinic

on Summer Street in the Summer Street Office Building.

JOHN T. LANE of Biloxi is the new president of the Gulf Coast Opera Theatre for the 1970-71 season.

GERALD M. LITTLE of Natchez announces the removal of his office to 140 Jefferson Davis Blvd.

CHESTER W. MASTERSON of Vicksburg was installed as president of the Mississippi Eye, Ear, Nose and Throat Association at its annual meeting in Biloxi.

S. H. McDONNIEAL, JR. and Mrs. McDonnieal will serve as second vice presidents of the Murrah High School PTA in Jackson for the 1970-71 school year. DR. and Mrs. JULIAN WIENER will be first vice presidents.

WILLIAM M. MCKELL, JR. of Jackson announces the relocation of his office at 838 Lakeland Drive. Dr. McKell limits his practice to internal medicine and gastroenterology.

PAUL H. MOORE of Pascagoula was installed as president of the Medical Alumni Chapter of the University of Mississippi Alumni Association at the chapter's annual assembly in Biloxi in May.

JAMES CLAY HAYS has associated with WILLIAM H. ROSENBLATT of Jackson in the practice of cardiology in Suite 615, Medical Arts Building, 1151 N. State.

W. K. STOWERS and K. B. STOWERS of Natchez announce the removal of their offices to 140 Jefferson Davis Blvd.

LAMAR THAGGARD of Madden has been named "Mississippi's Outstanding Livestockman for 1970" by the Mississippi State University Block and Bridle Club.

CHARLES C. TYLER of Collins spoke at the Jefferson Davis Baptist Brotherhood meeting at Carson Baptist Church in late May.

J. W. WATKINS of Quitman is heading the 1970 campaign to raise funds for the Clarke County Mental Health Association.

LESTER D. WEBB of Calhoun City has been named "Alumnus of the Year" of Wood Junior College. The ceremony took place during recent Alumni Day activities in Mathison.

ANDREW J. YATES of Jackson and ROBERT C. TIBBS II of Cleveland have been elected fellows in the American Academy of Pediatrics.

Summer time...monilia time!

No wonder you see so many more cases of vaginal moniliasis during this season. A damp, warm bathing suit provides a perfect breeding ground for fungal invaders. But your patients need not suffer the pain, the embarrassment and the discomfort of these stubborn infections. Nor the disappointment which comes when they find "the cure didn't take."

Candeptin avoids disappointment.

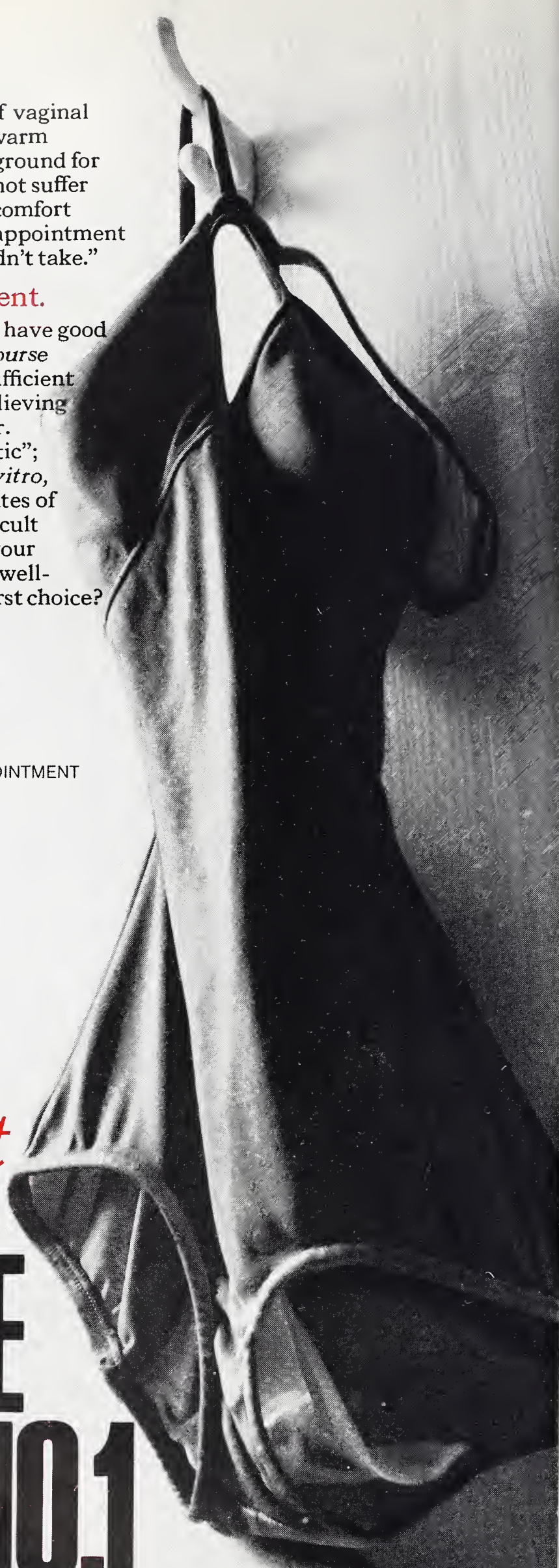
With CANDEPTIN, you and your patients have good reason for confidence. A single, 14-day course of therapy with CANDEPTIN is usually sufficient to eradicate the invader, while rapidly relieving itching, burning, discharge and malodor. And CANDEPTIN is "cidal" as well as "static"; 100 times more potent than nystatin *in vitro*, it has achieved culture-confirmed cure rates of 90% and more (even in notoriously difficult pregnant patients). Why not maximize your chances of success by adopting effective, well-tolerated CANDEPTIN as your agent of first choice?

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Candeptin[®]
candicidin VAGINAL TABLETS/OINTMENT

*the fortnight
fungicide for*

**PRIVATE
ENEMY NO.1**



Candeptin[®] CANDICIDIN

Formula:

CANDEPTIN Vaginal Ointment contains a dispersion of candididin powder equivalent to 0.6 mg. per gm. or 0.06% candididin activity in U.S.P. petrolatum. 3 mg. of candididin is contained in 5 gm. of ointment or one applicatorful. **CANDEPTIN** Vaginal Tablets contain candididin powder equivalent to 3 mg. (0.3%) candididin activity dispersed in starch, lactose and magnesium stearate.

Indications:

Vaginal moniliasis due to *Candida albicans* and other *Candida* species.

Contraindications:

Patient sensitivity to any of the components. During pregnancy manual tablet insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.

Caution:

Clinical reports of sensitization or temporary irritation with **CANDEPTIN** Vaginal Ointment or Vaginal Tablets have been extremely rare. To avoid re-infection, it is recommended that the patient refrain from sexual intercourse during treatment or the husband wear a condom.

Dosage:

One vaginal applicatorful of **CANDEPTIN** Ointment or one Vaginal Tablet is inserted high in the vagina, twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.

Dosage forms:

CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). **CANDEPTIN** Vaginal Tablets are packaged in boxes of 28, in foil, with inserter—enough for a full course of treatment. Store under refrigeration.

Federal law prohibits dispensing without prescription. **CANDEPTIN** is a registered trade-mark of Julius Schmid, Inc.



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PHARMACEUTICALS
New York, N.Y. 10019



NEW MEMBERS


The following physicians have been elected to membership by their respective component medical societies in the Mississippi State Medical Association and the American Medical Association.


EVERS, CARL GUSTAV, Jackson. Born Lake Benton, Minn., July 30, 1934; M.D., University of Minnesota School of Medicine, Minneapolis, 1959; Interned University Medical Center, Jackson, one year; pathology residency, University Medical Center, Jackson, July 1, 1960-October 31, 1961 and August 1, 1962-March 31, 1964; elected January, 1970, by Central Medical Society.

KLIESCH, WILLIAM FRANK, Jackson. Born Franklinton, Louisiana, Nov. 4, 1928; M.D., Louisiana State University School of Medicine, New Orleans, 1953; Interned Valley Forge Army Hospital, Phoenixville, Pa., one year; internal medicine residency, Charity Hospital, New Orleans, La., July 1, 1956-June 30, 1957 and Ochsner Foundation Hospital, New Orleans, La., July 1, 1957-June 30, 1959; elected January, 1970, by Central Medical Society.



DEATHS

 **GRAVES, ZEBULAN BUTLER**, Hattiesburg. M.D., Tulane University School of Medicine, New Orleans, 1926; Interned Hillman Hospital, Birmingham, Ala., one year; died May 18, 1970, age 67.

 **MOORE, WALLACE CROCKETTE, JR.**, Rosedale. M.D., University of Tennessee College of Medicine, 1950; Interned John Gaston Hospital, Memphis, Tennessee, one year; died May 22, 1970, age 52.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 20-24, 1971, Atlantic City, Clinical Convention, Nov. 29-Dec. 2, 1970, Boston. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Southern Medical Association, 64th Annual Meeting, Nov. 16-19, 1970, Dallas. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

STATE AND LOCAL

Mississippi State Medical Association, 103rd Annual Session, May 3-6, 1971, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Mississippi Academy of General Practice, Annual Assembly, Oct. 20-22, 1970, Biloxi. Miss Louise Lacey, Executive Secretary, P. O. Box 1435, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Robert P. Henderson, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday, April and First Wednesday November, 2:00 p.m., Clarksdale. Walter T. Taylor, P.O. Box 1237, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. C. Hal Cleveland, P.O. Box 1018, Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Res-

taurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, April and October. Cherie Friedman, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. James E. Booth, Eupora, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October, Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. M. Howell, 139 Kirkwood St., Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, June, September, and December. Donald E. Dore, Singing River Hospital, Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. W. B. White, Medical Arts Bldg., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.



Ole Miss Medical Alumni House Adds New Dimension to Med Center Complex

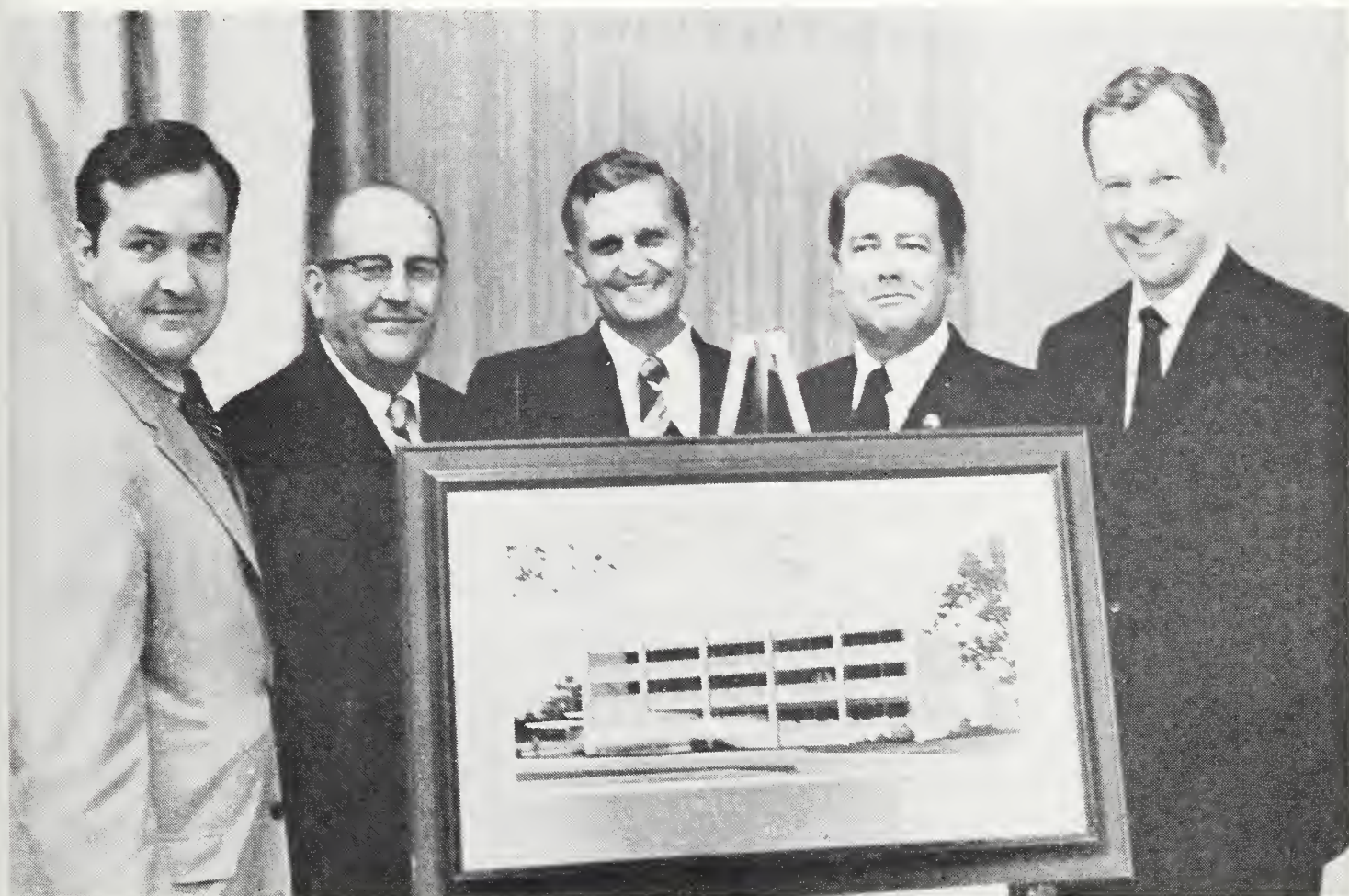
The Medical Alumni House of the University of Mississippi Medical Center at Jackson was dedicated at a late afternoon ceremony in the UMC School of Nursing Auditorium. Dr. Hector S. Howard of Memphis, medical alumni president, presided.

Dr. Howard gave the history of the Medical Alumni House and recognized the building committee. Dr. William E. Bowlus of Jackson, chairman of the dedication committee, introduced the dedicatory speaker, Dr. Arthur C. Guyton, chair-

man of the UMC department of physiology and biophysics.

Dr. Guyton emphasized that the completion of the alumni house is only a beginning in the total future plans for the medical center. He called on the alumni for assistance and support in achieving other goals including a postgraduate center and recreational facilities for the medical students and their families.

Dr. W. Alton Bryant, vice chancellor of the University of Mississippi, and Dr. Robert E. Car-



Examining the architect's rendering of the now-finished UMC Medical Alumni House are, from left, Drs. Hector S. Howard of Memphis, medical alumni president; W. Alton Bryant of Oxford, Ole Miss vice

chancellor; Paul H. Moore of Pascagoula, alumni president-elect; Howard A. Nelson of Greenwood; and Robert E. Carter, medical center dean and director.

ORGANIZATION / Continued

ter, dean and director of the University Medical Center, responded and accepted the dedicatory remarks.

Dr. J. Daniel Mitchell of Jackson, chairman of the Finance Committee, dedicated the guest rooms and the conference room. Dr. Bowlus recognized the class representatives present.

The three-story, contemporary structure, costing just under \$700,000, offers 40 double rooms with two suites, a snack bar, conference facilities, and headquarters for the medical alumni offices, according to C. W. Bill Price, alumni secretary at Jackson.

Alumni offices will be on the first floor. Also located there are the lobby and registration desk, food service and preparation areas, conference room, hostess' apartment, and mechanical rooms.

The alumni house will be available to alumni, out-of-town visitors to the UMC campus, and to physicians attending postgraduate training courses.

The building was constructed with assistance from the State Building Commission and underwritten by Ole Miss medical alumni. It is expected to be self-amortizing from room revenues, food sales, and other sources.

Architects for the building were Bouchillon and Harris of Jackson, and Jones and Thompson Construction Company of Jackson was general contractor.

An informal tour of the Medical Alumni House preceded the buffet supper following the dedication.

Dr. Hill Is Named Delegate to AMA

Dr. Stanley A. Hill of Corinth has been appointed to serve as delegate to the American Medical Association from Mississippi. He succeeds Dr. Howard A. Nelson of Greenwood who has resigned the post.

The appointment was made by Dr. Paul B. Brumby of Lexington, association president, who named Dr. Hill from his former post of alternate delegate. The unexpired term he will serve continues through 1970.

Serving with Dr. Hill is Dr. G. Swink Hicks of Natchez, the association's senior delegate whose current term is Jan. 1, 1970, through Dec. 31, 1971. Dr. Joseph B. Rogers of Oxford is alternate delegate to Dr. Hicks with a concurrent term.

Succeeding Dr. Hill in the alternate delegate post is Dr. C. D. Taylor, Jr., of Pass Christian, also an appointee of President Brumby.

Dr. Taylor is a delegate-elect, having been named to a full regular term by the House of Delegates at the 102nd Annual Session. He enters office on Jan. 1, 1971, to serve through Dec. 31, 1972. Dr. Hill was re-elected alternate delegate and will assume that office concurrently with Dr. Taylor's becoming the delegate on next Jan. 1.

Drs. Hicks and Hill were seated at the recent Chicago AMA annual convention with Drs. Rogers and Taylor serving as their alternates.

Under the apportionment formula of one AMA delegate per 1,000 members of AMA or fraction thereof, Mississippi seats two delegates in the AMA House.

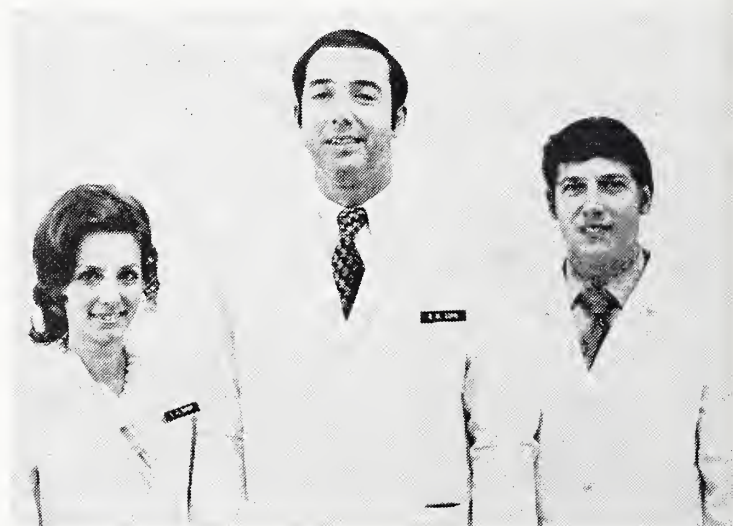
SAMA Reactivated at UMC

The Student American Medical Association chapter at the University of Mississippi School of Medicine has been reactivated.

Some 77 members from the freshman and sophomore classes have been recruited. Officers were elected from the first year students, and will serve a one-year term.

Newly elected officers are Bill W. Long of Blue Springs, president; Ray Johnson of Forrest, vice president; and Sandra Shook of Jackson, secretary-treasurer.

Plans are to hold monthly meetings at noon on Tuesday. Speakers are being sought on socioeconomic developments as well as medical trends.



Newly elected officers of the University Medical Center's SAMA chapter are, from left, Sandra Shook of Jackson, secretary-treasurer; Bill W. Long of Blue Springs, president; and Ray Johnson of Forrest, vice president.



Book Reviews

Manic Depressive Illness. By George Winokur, M.D., Paula J. Clayton, M.D., and Theodore Reich, M.D. 186 pages. St. Louis: The C. V. Mosby Co., 1969. \$6.50.

Written by the psychiatry group at Washington University, St. Louis, from the classic (description-classification and nomenclature) position point, this book is a thorough review of manic-depressive reaction with concise summaries at the end of each chapter and many paragraphs. It is reasonably short, thus not cumbersome or boring to read.

The coverage of and approach to the illness is from the genetic-epidemiological as well as the clinical.

Some interesting findings are revealed as a result of the authors' clinical research study, e.g., the incidence of manic-depressive primary states are three times that of schizophrenic reactions; M-D disorders more likely to be associated with relapses than depressive disorders and a considerable number will experience only one attack and most patients do not follow a chronic (continuous disease) course; none of the obsessional neurotics had attacks of mania; that bipolar female patients more likely to attempt suicide (in depression) but the manic episode lasted half the time of men, 73 days; the minority of patients have complete and lasting remissions with depressive symptoms the major problem during follow-up; a M-D woman with previous postpartum episode is considered a special risk in subsequent post-birth periods; major contribution to M-D disease seems to be from an x-linked dominant gene.

Admittedly, the authors had a small series of hospital and clinic patients (51) but the methodology of their clinical-genetic study, which rigorously defined M-D disease, seems painstakingly sound. They do not delude themselves about the limitations and shortcomings of their study.

The authors point out that the largest part of the error in the family study is the false-negative, the person called well by family history but found afflicted with some mental or emotional disorder

by personal interview. Also that affective illness is quite likely not to necessitate hospitalization, more often for mania than depression; and that depression prior to or after mania is not invariable.

The indexing of the symptoms is excellent from the standpoint of what the patient and family report in manias and depressions, the most reactive symptom, irritability, "perhaps."

The question of etiology remains a riddle after a good review of the biologic, psychologic and social suppositions.

The therapy chapter reminds us of the three-fold management purposes: (1) prevent serious social and medical consequences of depression. (2) temper depressive affect and alleviate guilt feelings, and (3) help the family understand the patient and his illness.

Some new empirical combination drug approaches are briefly discussed in addition to the more conventional attacks. The authors feel it is not unreasonable to try new treatments when other methods have failed and the patient is severely incapacitated.

ROBERT L. MCKINLEY, JR., M.D.

Crisis Fleeting. Original Reports on Military Medicine in India and Burma in the Second World War. Compiled and edited by James H. Stone. 423 pages with illustrations. Washington, D. C.: The U. S. Government Printing Office, 1969. \$3.75.

This is a collection of remarkable diaries and reports written by Army Medical Department personnel while serving in the India-Burma Theater during WWII.

"North Tirap Log," is a daily diary meticulously recorded between 19 April and 20 December, 1943, by Mr. (then Sgt.) R. M. Fromant while assigned to an aid station on a foot trail leading from Assam Province, India, to the Hukawng Valley of Burma. Here, among steep, heavily forested hills, such a long way from civilization, they provided medical support to the engineer, quartermaster, signal, and Chinese infantry troops painfully making their way into Burma to claw out a new road through the jungle.

"The Tamraz Diary" is a journal which Col.

THE LITERATURE / Continued

John M. Tamraz, MC, compiled while a senior surgeon in the China-Burma-India Theater.

"With Wingate's Chindits" is the final report on the medical arrangements for the British Special Force which fought behind enemy lines in North Burma in 1944.

"Chinese Liaison Detail" is a realistic account of medical experiences during the unbelievable struggle to build the Ledo Road.

The controversial exploits of Merrill's Marauders is further illuminated by "Marauders and Microbes," which is a joint personal report by two physicians who served with the unit during those exciting events.

These humanized "on the spot" narratives glow with the vitality of personal experience. Several hours of fascinating reading is assured, especially for the physician who has served in either the C.B.I. Theater, or in any of the jungles of the South and Southwest Pacific. The entire volume adds greatly to the already illustrious military medical history of World War II.

ROBERT E. BLOUNT, M.D.

Dr. Arrington Retires From Blues Board



On his retirement from the Board of Mississippi Blue Cross-Blue Shield, Meridian physician, Dr. G. Lamar Arrington, Sr., received special recognition from Owen Cooper for his years of service. The presentation took place at the annual board meeting in Jackson, at which time John D. Holland of Jackson was elected to succeed Owen Cooper as Chairman of the Board of Mississippi Hospital and Medical Service.

AMA Judicial Council Plans Ethics Congress

The Judicial Council of the American Medical Association will hold its 3rd National Congress on Medical Ethics Sept. 19-20.

The meeting will take place at the Ambassador West Hotel in Chicago.

The program will include panel discussions and individual speakers addressing ethical issues of concern to the medical profession.

For further information, write Judicial Council, AMA, 535 North Dearborn St., Chicago, Ill. 60610.

TELEMED Develops Multiprocessing Computer

TELEMED Corporation, of Schiller Park, Ill., has developed an on-line multiprocessing computer facility for real-time analysis of medical data as an aid to the physician in making diagnoses.

TELEMED, a subsidiary of MEDEQUIP Corporation of Park Ridge, Ill., offers computer analysis of electrocardiograms through a dual configuration of Xerox Data Systems Sigma 5 computers. The central facility has the capability to handle up to 8600 ECGs per day by accommodating simultaneous transmission and analysis of data. Multiple telephone lines connect the central computer facility to remote coupled ECG units located in hospitals, diagnostic and industrial clinics, medical centers, nursing and convalescent homes, and physicians' offices.

The computer performs an analysis which measures all pertinent ECG amplitudes and durations, characterizes the wave forms from each of the twelve leads of the scalar electrocardiogram, calculates such factors as rate and electrical axis, and produces an interpretation of the status of the electrical function of the heart based upon these parameters. The analysis is then transmitted via telephone line to a teletype unit on the subscriber's premises, for assessment by the physician.

Dr. Ainsworth Is AUA President-Elect

Dr. Temple Ainsworth of Jackson has been elected president-elect of the American Urological Association. He will assume office in May, 1971.



Dr. Ainsworth

The Jackson urologist was elected at the association's annual meeting in Philadelphia, Pa.

A native Mississippian, Dr. Ainsworth earned his B.S. degree from the University of Mississippi and his M.D. degree from the University of Virginia. He completed internship and urological training at the University of Virginia

Hospital. Dr. Ainsworth was a resident in surgery at South Mississippi Charity Hospital during 1928-29.

Upon completion of training in 1929, he began the private practice of urology in Jackson. He is on the attending staff of the Mississippi Baptist Hospital, St. Dominic-Jackson Memorial Hospital, University Hospital, Doctors' Hospital, and Hinds General.

Long active in medical organization, Dr. Ainsworth has served as president of the state medical association, chaired the association's Council on Medical Education for a number of years, and has been a member of the Council on Medical Service.

Dr. Ainsworth has served as president of the Central Medical Society and president of the Mississippi chapter of the American College of Surgeons. He has also been ACS governor for Mississippi.

He is a diplomate of the American Board of Urology, and a fellow of the American College of Surgeons. He holds membership in the American Society for Pediatric Urology, American Association of Clinical Urologists, and the Society of University Urologists, the American Medical Association, and the Southern Medical Association.

Dr. Ainsworth served as chairman, department of urology, and clinical professor of urology, at the University of Mississippi School of Medicine from 1954-1968. He is also chairman of the Mississippi Kidney Foundation.

Thoracic Society Officers Elected

During the Annual Meeting of the Mississippi Thoracic Society, held in Jackson on Thursday, April 16, new officers for the 1970-71 year were elected.

New officers included: Dr. Antone Tannehill, Jr., Tupelo, president; Dr. Roland B. Robertson, Jackson, vice-president; Dr. G. Boyd Shaw, Jackson, secretary-treasurer; Dr. Guy D. Campbell, Jackson, ATS Advisory Council member; Dr. John Williams, Greenville and Dr. John Morgan, Jackson, Executive Committee members. Dr. Boyd Shaw will continue serving as Tri-State Consecutive Case Conference representative for the Society in planning the program for this meeting jointly sponsored by the Thoracic Societies and TB-RD Associations of Mississippi, Alabama and Louisiana.

The scientific session of the one-day annual meeting included the following guest speakers and their topics: Dr. John Ochsner, chairman of department of surgery, Ochsner Foundation Hospital and Clinical Associate Professor, Tulane University School of Medicine, New Orleans, speaking on "Bronchial Adenomas" and "Thoracic Lesions in the Infant Requiring Urgent Surgical Care"; and Dr. Joseph Bates, chief of medicine, V. A. Hospital and associate professor of medicine, University of Arkansas, Little Rock, speaking on "Needle Biopsy for Diffuse and Localized Lesions of the Lungs"; "Pneumonia—'Yesterday and Today,'" and "Pulmonary Tularmia."

Dr. James Hardy, University Medical Center, Jackson, presented a special lecture during the annual meeting luncheon on "Current Status of Lung Transplants." In addition, case presentations were made by the following Society members; Dr. Robert Cole, Amory; Dr. Benton Hilbun, Tupelo; Dr. John R. Williams, Greenville; and Dr. Fred Tatum, Hattiesburg.

The Mississippi Thoracic Society serves as the medical arm of the MTRDA. Physicians interested in membership in the Society are requested to direct their inquiries to P.O. Box 9865, Jackson, Mississippi.

Construction Begins on MHA Headquarters

The Mississippi Heart Association broke ground for their new headquarters building at 4830 McWillie Circle in North Jackson with an impressive line-up of dignitaries in attendance.

Dr. Jetson P. Tatum of Meridian, former MHA president, was master of ceremonies. Dr. Arthur C. Guyton, professor and chairman of the department of physiology and biophysics of the University of Mississippi Medical Center, was guest speaker for the ceremonies and following luncheon at Lefleur's Convention Center. Dr. Guyton discussed the accomplishments in, and the future outlook for, heart research in Mississippi.

The late Miss Ethel Ketcham of Jackson bequeathed to the heart association funds for the express purpose of purchasing property and with



Breaking ground for the Mississippi Heart Association's new headquarters building in Jackson were, from left, Dr. Arthur C. Guyton of Jackson, former president and guest speaker for the occasion; Miss Lucile Little of Jackson, MHA executive director; Dr. G. Spencer Barnes of Columbus, 1970 president; Ray R. McCullen of Jackson, state treasurer and chairman, building committee; and Dr. Jetson P. Tatum of Meridian, master of ceremonies and past president.

this the lot was bought, according to Dr. G. Spencer Barnes of Columbus, president.

The Building Finance Committee is composed of Everett Crudup of Meridian, chairman, Charles R. Sayre of Greenwood, Dr. Frederick E. Tatum of Hattiesburg, Ray R. McCullen and Ernest G. Spivey, both of Jackson.

McCullen also chaired the Building Committee, appointed by Congressman G. V. Montgomery, MHA president in 1968. Spivey and Randal Craft, also of Jackson, served as members.

John L. Turner and Associates of Jackson are the architects and Pat Cronin Construction Company is the builder.

D. A. Grimes Named UMC Hospital Director

D. Andrew Grimes has been named director of the University Hospital in Jackson, according to Dr. Robert E. Carter, director of the University Medical Center.

The Board of Trustees, Institutions of Higher Learning, formally approved the appointment at the May meeting.



Mr. Grimes

Grimes succeeds Dr. David Wilson, who was hospital head for some 15 years prior to his elevation to assistant director of the Medical Center for health planning in 1969.

The new hospital director joined the Mississippi staff in 1967 as associate director. He was previously assistant director at Vanderbilt University Hospital, administrative research coordinator and assistant director of the Vanderbilt University Medical Center in Nashville.

Grimes holds the A.B. degree from Washington and Jefferson College and the M.S. degree from the University of Pittsburgh. At Cornell University he had additional training in hospital administration.

He is affiliated with the American Hospital Association, Association of American Medical Colleges, American College of Hospital Administrators, Mississippi Hospital Association and Society of Hospital and Medical Administrators.

MSBH Sponsors Radiological Courses

Courses in radiological health for x-ray technologists were recently offered by the State Board of Health, free of charge, in Jackson, Tupelo, Laurel and Biloxi, according to State Health Officer Hugh B. Cottrell.

Dr. Cottrell said the Southeastern Radiological Health Laboratory in Montgomery, Ala., cooperated with the Radiological Health Unit of the State Board of Health in presenting the courses and furnished a team of instructors.

Serving as coordinators were Ronald J. Forsythe and Charles E. Hilton, health physicists in the Radiological Health Unit.

"Through these courses," said Forsythe, "we hope to minimize the danger of radiation exposure to Mississippians who have x-rays performed for diagnostic interpretation as well as to those operating the x-ray machines."

The State Board of Health offered radiological health courses for x-ray technologists in 1965, but a rapid transition in technology has taken place since then, Forsythe pointed out.

A 5-day course, open only to instructors in x-ray technology, was held June 8-12 at the State Health Department in Jackson.

"Structured for instructors, this course presented the principles of teaching radiation protection as well as basic radiological health," said Forsythe.

A 2-day course, "designed to create an atmosphere and feeling for radiation protection for both patient and radiation worker," was conducted in four different locations in the state, according to Forsythe.

Eligible for this course were professional x-ray technologists and students who are in the senior year of x-ray technology and are planning on a professional career in the field.

Medical Center Graduates 75 M.D.'s



At the 14th annual University of Mississippi Medical Center Commencement, 75 received the M.D. degree; 32, the B.S. in nursing; 11, the Ph.D.; and four, the M.S. At left, Chancellor Porter L. Fortune conferred degrees and Judge James P. Coleman of the U. S. Fifth Circuit Court of Appeals, second left, was Commencement speaker. Dean of the School of Medicine Dr. Robert E. Carter, third left, presented

medical degree candidates. Dr. Jerry Clifford Griffin of Silver Creek, third right, was the recipient of the Waller S. Leathers Medal, given annually for the highest four-year medical average, while Mrs. Carol Ann Sitton McGehee, second right, got the Faculty Award, which goes to the top nursing student. Miss Christine L. Oglevee, dean of the School of Nursing, right, presented nursing degree candidates.

MPAC

AMPAC

give you IMPACT, doctor!

But make it a mutual impact, doctor, because your PAC needs you and you need your PAC. Both AMPAC and each of the 50 state PAC's are voluntary, nonprofit, unincorporated, autonomous groups whose members are physicians, their wives, and others in allied professions. Every group is bipartisan, bound by no party label. The voting record, platform, and program of a candidate—not his party—is what the PAC considers.

The basic purpose is twofold: To educate in political affairs and to provide a means through which the physician-citizen can effectively make his voice heard in the political arena. MPAC is medically oriented and medically directed by a 10 member board consisting of nine physicians and a Woman's Auxiliary representative.

With the elections behind, MPAC is looking ahead to 1970 when there will be a job to do. Make your voice count by sending your dues today, \$10 for MPAC and \$10 for AMPAC. Better send dues for your wife, too.



MISSISSIPPI MEDICAL
POLITICAL ACTION
COMMITTEE

Flying Physicians Meet in Canada

The 16th annual meeting of the Flying Physicians Association will be held at the Bayshore Inn, Vancouver, British Columbia on Aug. 23-28.

It will mark two firsts for the group of flying doctors: their first convention outside the United States, and their first yearly meeting in Canada.

Dr. Curtis Caine, Jackson anesthesiologist, will preside over the five day meeting.

Between 700 and 900 persons are expected to attend and many of them will fly their own aircraft to Vancouver International Airport. Tie-down facilities and space will be required for more than 200 aircraft.

The program will include lectures on medical subjects, aerospace medicine, general aviation safety, maximum aircraft performance, and other related subjects.

Program Chairman Dr. Marvin B. Hays, Eureka, Cal., is also planning a series of round table discussions on such subjects as instrument flight routine versus visual flight routine, how to survive a crash, ladies in the air, lady pilots, getting along with the weather, and engine maintenance.

Dr. Gordon Hepworth, Vancouver, is serving as chairman of the local arrangements committee. Many of the key speakers will be recruited locally. Assisting Drs. Hays and Hepworth in this effort will be Dr. Reginald R. Harper of North Surrey, British Columbia.

In the exhibit area of the Bayshore Inn, registrants will have the opportunity to view the latest in medical and aviation products. A number of manufacturers and scientific organizations will have exhibits on display. Manufacturers of small aircraft will have a number of planes on static display at Vancouver International Airport.

A special program is being planned for the wives and children who attend the meeting. In charge of these activities is Mrs. Reginald R. Harper of North Surrey, B. C.

A portion of the program will be devoted to the humanitarian activities of the Flying Physicians Association. Many members are volunteering to serve in humanitarian projects, such as volunteer physicians for Viet Nam and Project Hope.

The Flying Physicians Association was started in 1954 by a group of doctors whose chief objective was to organize an association of private pilots dedicated to the promotion of general aviation safety through example and teaching.

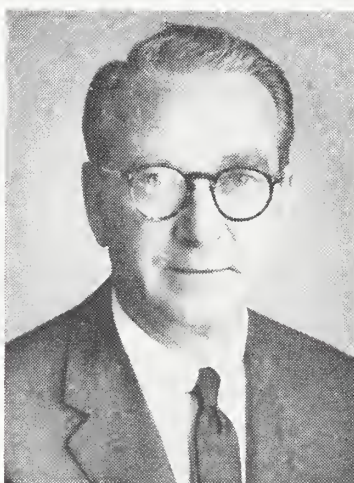
The Association has grown from its 1955 membership of 700 members to its present membership of over 2200. This includes members in the U. S., Canada, Mexico, Puerto Rico, Central and South America, the West Indies, Australia, West Germany, England, and the Republic of the Congo.

Wyeth President Is Foundation Chairman

Herbert W. Blades, president of Wyeth Laboratories, has been elected chairman of the board of directors of the Pharmaceutical Manufacturers Association Foundation.

The Foundation, established by the Association in 1965, is a

non-profit organization that supports research, educational and scientific projects in the field of clinical pharmacology and related disciplines. Its stated purpose is "to promote the betterment of public health through scientific and medical research."



Mr. Blades

The PMA Foundation is supported by voluntary contribu-

tions from about 100 companies and pharmaceutical and industry-related organizations and individuals. Since its formation, the Foundation has authorized over \$2,200,000 to aid a variety of activities, including: education and training awards to medical school faculty members and students in clinical pharmacology, and postdoctoral fellowships in pharmacology-morphology; and fundamental research in areas of drug toxicology, such as fetal-neonatal pharmacology, nutritional deficiencies, dialyzable drugs, and animal-human predictability studies.

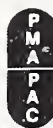
The Foundation conducts periodic workshops and conferences on such topics as drug metabolism and drug evaluation, and continuing education programs in drug therapy topics for practicing physicians, hospitals and medical societies.

Mr. Blades is also executive vice president and a director of Wyeth Laboratories' parent company, American Home Products Corporation. He has been president of Wyeth since 1956, and has been a director of the Pharmaceutical Manufacturers Association since it was founded in 1958.

This "case history" runs to some 10,000 pages

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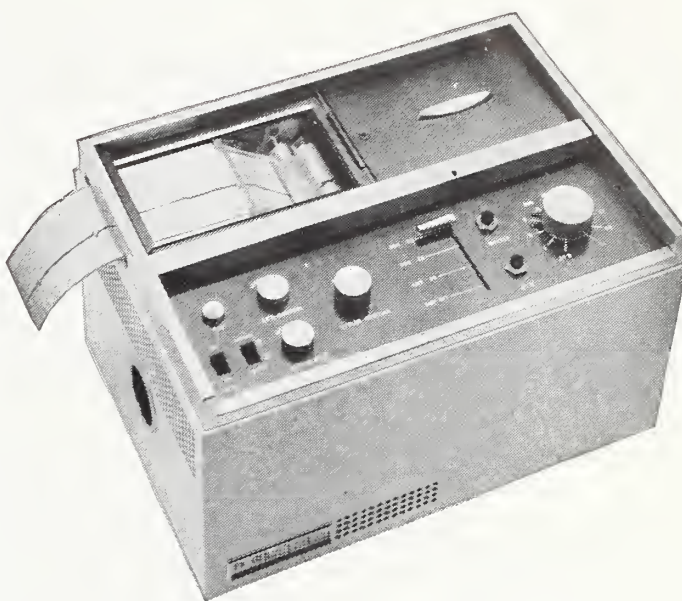
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Index to Advertisers

Arch Laboratories, Div. of Lewis Howe Co.	411	Leonard Wright Sanatorium	14
Breon Laboratories, Inc.	8	Eli Lilly and Company	front cover, 18
Bristol Labs	16, 17	Mississippi Hospital and Medical Service	15
Burroughs-Wellcome	392B	MPAC-AMPAC	408
Campbell Soup Company	380A	National Drug Company ...	384A, 384B, 400A, 400B
Conal Pharm. Inc.	380D	Pharmaceutical Manufacturers Association	410
Dow Chemical Co.	392A	William P. Poythress	392C
Eaton Laboratories, Div. of Norwich Pharmacal ...	11	Roche Laboratories	fourth cover
Flint Laboratories, Div. of Travenol Labs, Inc.	7	Schering Corporation	14A, 14B, 14C, 14D
Geigy Pharmaceuticals	392D, 393	Julius Schmid, Inc.	398, 399
Hill Crest Hospital	6	G. D. Searle Company	380B, 380C
Hynson, Westcott and Dunning, Inc.	3	Stuart Pharmaceuticals, Div. of Atlas Chemical Industries, Inc.	second cover
Kay Surgical, Inc.	411	Wyeth Laboratories	395, 396
Lederle Laboratories	4, 10, 12, 391	Thomas Yates and Company ...	third cover

IN CONCLUSION

New York's Medicaid program, often called an uncontrolled fiasco from the beginning, will run up a \$1 billion tab in 1970. Program in New York City costs about \$700 million of which hospitals get 52 per cent, nursing homes 11 per cent, dentists 9.5 per cent, physicians 6.6 per cent, drugs 5 per cent, and remainder for miscellaneous services. In New York City, one out of four citizens is eligible for Medicaid benefits.

A shortage of dental manpower that cannot be met within the framework of present dental practice faces the U.S. Dr. John Zapp, special assistant for dental affairs in HEW is urging organized dentistry to assert leadership in expanding use of hygienists and assistants before government does it for the profession. Dr. Zapp believes that more dental schools and expanded classes will not be sufficient to meet the crisis.

Data communications, the business of a computer talking to another computer or making use of one via long distance, is the hottest expanding market in U.S. By 1975, data communications devices market will expand 1,000 per cent and could capture as much as 50 per cent of the telephone network in another five years. Medicine will compete with business as leading major user of data communications with hospitals, medical schools, and even M.D.'s using computers.

Child-resistant containers - CRC's - are strongly advocated for R packaging by American Academy of Pediatrics. AAP feels that 90 per cent of drug poisonings in children under five could be stopped with proper containers. CRC's need not be such that adults have trouble opening. Specifications for containers are that they should be effective, simple, and never be made to appear as a toy. In tests, adult patients with dexterity loss were able to use CRC's.

School nurse practitioners will be a new breed of semi-autonomous allied health professionals graduated from University of Colorado Medical Center. Program aims for postgraduate training after B.S. in nursing is awarded. SNP's will treat minor illness, do physical exams, provide immunizations, and be able to assess development and behavioral problems in children. New curriculum is being assisted by a grant to UCMC from Commonwealth Fund.

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CONTENTS

ORIGINAL PAPERS

- Maternal Mortality Related
to Anesthesia (1957-
1967) in Mississippi **413** DONALD M. SHERLINE,
M.D.
- Resuscitation of the
Newborn **417** ROSS E. SMITH, M.D., and
ALFRED W. BRANN, JR.,
M.D.

SPECIAL ARTICLES

- Radiologic Seminar
XCVIII: Duplications of
the Renal Pelvis and
Ureter **424** T. S. McCAY, M.D.
- Proceedings of the House
of Delegates, 102nd
Annual Session **427** Annual Publication

EDITORIALS

- Decision on Abortion:
The Next 90 Days **443** Real or Rhetorical
- Is the Muse Usually
Boozed? **445** Alcoholic Authors
- The Durability of the
Hill-Burton Act **446** First Veto Loss
- Muscle Busters Are Not
Dum-dums! **446** Sports Science
- The Bittersweet Issue
of Cyclamates **447** Tip of the Iceberg

THIS MONTH

- The President Speaking **442** Our Medical Democracy
- Medical Organization **451** 103rd Annual Session

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LSD-Alcoholism Study Wins Hofheimer Award

A four-year clinical study, which conclusively disproves claims that LSD is effective in treating alcoholics, has won the American Psychiatric Association's Hofheimer Award for 1970. The Lester N. Hofheimer Prize for Research was presented to the principal investigators, Drs. Jerome Levine, and Arnold M. Ludwig, and research assistant Louis H. Stark, A.B., at the annual meeting of the APA in San Francisco.

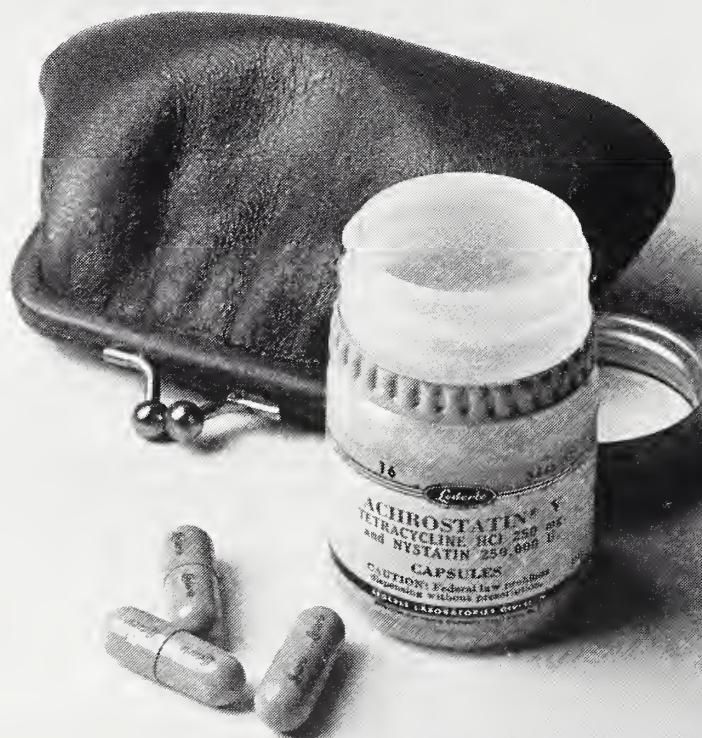
Dr. Jerome Levine, chief, Psychopharmacology Research Branch, Division of Extramural Research Programs, National Institute of Mental Health, and Dr. Arnold M. Ludwig, director of Education and Research, Mendota State Hospital, Madison, Wis. began their research investigation of LSD as a potential treatment agent in 1962, while serving with the Commissioned Officer Corps at the former U. S. Public Health Service Hospital in Lexington, Ky. (now NIMH Clinical Research Center). They developed and explored the use of a specialized LSD technique, known as hypnodelic therapy, in the treatment of narcotic drug addicts. In 1964, this study was extended to research on alcoholism at the Mendota State Hospital.

The experience and results have been compiled and documented in a volume, *LSD and Alcoholism: A Clinical Study of Treatment Efficacy*, to be published by Charles C Thomas, Springfield, Ill. This extensive report includes sections on background research information; detailed reports of the treatment study, related special studies, and follow-up studies of the alcoholic in the community; and an overview of treatment efficacy. The emphasis is on evaluation of treatment outcome rather than the treatment process. The investigators conclude from the findings of their four-year clinical study that dramatic claims for the efficacy of LSD treatment in alcoholism are unjustified.

Dr. Levine has been with the NIMH since 1964, when he was appointed research psychiatrist and assistant chief of the Psychopharmacology Research Branch. In 1967 he was appointed to his present position. He is also an instructor in psychiatry at the Johns Hopkins University School of Medicine in Baltimore, Md. From 1962 to 1964 he served as Assistant Chief Psychiatrist at the U. S. Public Health Service Hospital in Lexington, Ky., and as an instructor in clinical psychiatry at the University of Kentucky Medical Center in Lexington.

Dr. Ludwig is clinical professor in psychiatry at the University of Wisconsin Medical Center.

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NEWSLETTER

August 1970

er Doctor:

has presented testimony to the Congress agreeing with the Nixon proposal to abolish Medicaid in favor of all-federal health program. Administration plan is a federal health insurance program for poor and low income groups now qualified for Medicaid. AMA's Medicredit program would have government purchase health insurance for poor and tax credits on sliding scale in higher income levels.

Heart of AMA's Medicredit is a structured peer review mechanism to guarantee quality and financial success. Observers look for no action this year, but Senate Finance Committee has instructed staff to work with AMA in preparation of peer review amendments.

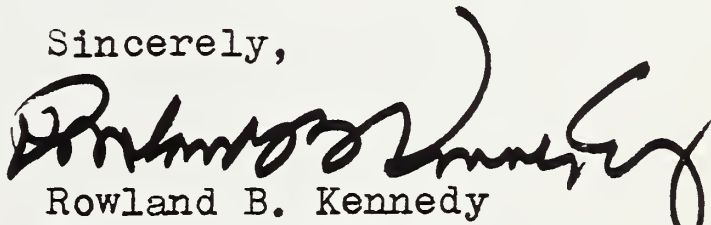
ee of the four CBS-TV stations in Louisiana have offered state medical society equal time to rebut network's blast at health care. er CBS refused equal time to AMA following slanted "Don't Get Back in America" programs, Louisiana stations took the initiative. y WWL-TV at New Orleans has balked on action. The two Mississippi CBS outlets airing programs made no offer for equal time.

version of hospital accreditation standards adopted by Joint Commission emphasizes the need for physicians on governing boards. Standards say that "members of the medical staff shall be eligible, and should be included in, membership on the hospital governing body." Revision also says that approval of the medical staff's by-laws, rules and regulations "shall not be unreasonably withheld."

k for favorable action by the Senate on S.3418 which will give medical schools federal assistance to train family practitioners. l would establish five-year program to expand or begin new GP residencies and also calls for Secretary of HEW to appoint a 12-member Advisory Council on Family Medicine. Move has been sparked by successful program of American Academy of General Practice.

days of dangerous fireworks are numbered, under recent regulations issued by Food and Drug Administration. Ban forbids interstate shipment of large firecrackers, including cherry bombs, rockets, salutes, and aerial bombs. Individual fireworks pieces and components with more than two grains of powder fall under order.

Sincerely,



Rowland B. Kennedy
Executive Secretary

NIH Provides Nursing Grants

New grants from the Division of Nursing are helping financially distressed nursing schools to remain operational until students who have already invested time and money in nursing education can graduate as scheduled and engage in nursing practice. The Division of Nursing is the nursing component of the Bureau of Health Professions Education and Manpower Training, National Institutes of Health.

A Special Project Grant of \$44,649 has been awarded to the Memorial Mission Hospital School of Nursing at Asheville, N. C. These funds are aiding this 76 year-old nursing education institution in the Appalachia area to complete the preparation of its last class—26 students who began their training in 1968 and are scheduled to graduate in 1971.

As a result of a Special Project Grant of \$246,162, the Capital City School of Nursing in Washington, D. C., is proceeding to complete the training of its last two classes. The total Federal investment in helping this 93 year-old school to graduate 40 new nurses in 1971 and an additional 40 in 1972 is expected to reach \$365,962.

Further information about Special Project

Grants as authorized by the Health Manpower Act, and how they serve to start new schools of nursing and to help existing schools remain in operation and produce greater numbers of well-prepared nurse practitioners may be requested from the Division of Nursing, 9000 Rockville Pike, Bethesda, Md. 20014.

Symposium on Prevention Released

Information of special interest to practicing physicians, internists and cardiologists is contained in a new Heart Association publication on preventive cardiology.

Named "Reducing the Risk of Coronary and Hypertensive Disease," the book stems from the Minnesota Symposium on Prevention in Cardiology which the Minnesota Heart Association sponsored in cooperation with the Mayo Clinic, Mayo Foundation, University of Minnesota, and American Heart Association's Council on Clinical Cardiology.

Edited by Henry Blackburn and Jennifer Willis, the book's 25 articles cover the several risk factors and provide practical suggestions for reducing the risk by controlling hypertension, diet, obesity, cigarette smoking and physical activity.

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DATELINE

Miss Pot Plot Thieves Target Oxford - A "secret" marijuana plot, one of several maintained by the Ole Miss School of Pharmacy, was raided by thieves who stripped mature cannabis plants. Site of raid was near Wiggins in Stone County. Project enabling Ole Miss to be the only legal pot farmer in U.S. is pharmacological investigation of different types of marijuana. Prior to this research, investigators had available only illicit samples of uncertain origin and age with which to work.

Polio Deaths Atlanta - The U.S. Public Health Service Commanded in 1969 municable Disease Center reports that not a single death from poliomyelitis was recorded in the United States last year. Only 19 cases of paralytic polio were reported, and among these only one patient had received the vaccine. In 1954, USPHS recorded 1,400 polio deaths and more than 2,000 paralytic cases. During 1969, about 26.5 million doses of vaccine were administered.

Task Force Sacks Private Care Washington - The 27-member health care task force headed by the controversial Blue Cross national president, Walter J. McNerney, says that it's too late to patch up the present private care delivery system and that the nation needs a totally new program. Three point proposal would replace Medicaid with a federal program, set up a new task force to write a national health insurance plan, and put new emphasis on prepaid group practice or closed panel care.

Four Seasons Goes to Bankruptcy Oklahoma City - Four Seasons Nursing Centers of America, biggest builder and operator of extended care facilities and child care centers, has filed for bankruptcy in federal court. In 1969, Four Seasons was considered a blue chip stock on the American Exchange, but trading was suspended last April after it plummeted to the bottom. Last two quarters show losses of about \$1 million. Four Seasons became third major U.S. corporation to go under this year, joining Penn Central Railroad and Poly Madison Industries.

Schering-Plough Merger Is Set New York - The prosperous ethical drug firm, Schering, and Memphis-based Plough, Inc., will merge to form a powerful ethical and over-the-counter combine. Plough is best known for St. Joseph and Coppertone lines and actually boasts annual sales greater than Schering. Since organizing in U.S. after having alien status from Nazi Germany, Schering has prospered under superb management. Its stock has split two-for-one on two occasions, increasing 700 per cent in value.

AMA Honors Science Students

Two 17-year-old high school students were awarded the top honors of the American Medical Association during the 21st International Science Fair in Baltimore, May 11-15.

They are Beverly A. Fordham, a junior at Bryan Adams High School in Dallas, Tex., and Kevin J. Boran, a senior at Lawton's Hill School in Pottsville, Pa.

In addition to their citations presented at the Health Awards Banquet by Dr. Gerald D. Dorman, president of the American Medical Association, they were honored guests and exhibitors at the AMA Annual Convention in Chicago, June 21-25.

They were selected for the AMA honors by a team of judges, members of the AMA Council on Scientific Assembly, chaired by Dr. Charles D. Bussey, Dallas, Tex.

Other winners, who received Awards of Merit from the AMA, were: Cheryl M. Engleman of Hazelton, N. D., James M. Gaither, Evansville, Ind.; Greg Kauffman, Albuquerque, N. M., and Kathy Wendt, Fairmont, Minn.

The six students were selected for their exhibits in health studies. Competing students to-

taled 402 exhibitors from 45 states, the District of Columbia, Puerto Rico, Canada, Brazil, Japan, the Philippines, Sweden and Switzerland.

Miss Fordham's exhibit was entitled, "Determination of Alpha Vigilance Via Electroencephalography," and Boran's was a study of "The Effects of Antidiuretic Hormone on Sweating Activity and Sweat Composition." Both exhibited in the International Amphitheatre throughout the AMA Annual Convention.

The AMA has participated in the International Science Fair since 1956 as part of its program to attract superior students to the study of the health sciences.

Miami Offers Otolaryngology Course

The University of Miami School of Medicine, Division of Otolaryngology, is presenting a postgraduate course in ENT for the Family Practitioner.

The course will offer 10 A.A.G.P. credit hours, and will be held Nov. 13-14, 1970, at the Sheraton Four-Ambassadors Hotel in Miami, Fla.

Course Director is Dr. Fredric W. Pullen II, Neuro-Otologic Laboratory, University of Miami School of Medicine, P. O. Box 875, Biscayne Annex, Miami, Fla. 33152.

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Health Screening Centers, Inc., has been organized to coordinate the licensing and operation of a nationwide network of early disease detection centers—mobile and in-plant—utilizing automated, miniaturized, electronic and computerized equipment.

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The whole procedure is performed in the spot—just one hour per individual at a cost of only \$35—and as you can see does not involve the practice of medicine in any way. HSC simply sends to the referring physician computerized test results which aid him in his diagnosis and possible treatment.



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Think of the possibilities for a mobile multiphasic screening unit in your area: company employees, union members, school children, and perhaps some unstructured indigent groups such as Indians, rural laborers, migrant farm workers. The need is well established. You will be bringing this vital low-cost preventive medicine to the very doorstep of these people—half of whom will not take themselves to a physician until obvious symptoms appear, which may be too late!

As surely as this service has humanitarian overtones, just as surely are you entitled to a profitable return on your investment. As a medical man, no one is better qualified than *you* to take part in this worthwhile enterprise. We want you to succeed. We *help* you to succeed.

How HSC helps the Licensee

Health Screening Centers, Inc., makes continuously available to investor groups the necessary technological counsel, sales guidance and legal advice. HSC will help you with initial new-business solicitations, advertising, publicity, recruitment of sales and operating personnel. At Denver headquarters, HSC will thoroughly train a staff to operate a mobile or in-plant facility. HSC will assist with all start-up procedures—in short, *everything you need to successfully operate your own health screening center.*

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A. H. Robins Acquires IUD

A. H. Robins Company has acquired the Dalkon Shield™, an intrauterine contraceptive device, it was announced today by E. Claiborne Robins, chairman of the board and chief executive officer of the Richmond-based pharmaceutical manufacturer.

The product and its patent rights were purchased from the Dalkon Corporation of Greenwich, Conn., for an undisclosed amount of cash.

The device was introduced commercially to the medical profession in November 1969. In clinical tests, the device has shown promise of a lower incidence of spontaneous expulsion, cramping and bleeding than other intrauterine devices. These same tests suggested that the device may also offer greater protection against pregnancy than other intrauterine devices.

The Dalkon Shield, which marks A. H. Robins entry into the field of medical devices, will be added to the company's present product line and promoted by its medical service representatives.

Viet Nam Volunteer Program Cited

Dr. Norman W. Hoover, director of the American Medical Association Department of International Medicine, accepted the "Silver Anvil" award May 14 at the Plaza Hotel, New York City, on behalf of the AMA's Volunteer Physicians for Viet Nam program. It was the top award presented by the Public Relations Society of America in the category of international relations.

In accepting the trophy from Donald B. McCammond, PRSA chairman of the board and president, Dr. Hoover asked that the honor be shared by the AMA and the Agency for International Development, U. S. Department of State. Both organizations have cooperated in the Viet Nam program for over four years in providing civilian physicians to work in provincial hospitals.

Silver Anvil awards have been presented each year since 1944 to acknowledge outstanding public relations programs. The anvil represents public relations activities measured "on the anvil of public opinion."

Brief Summary of Prescribing Information—9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

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ORIGINAL PAPERS

Maternal Mortality Related to Anesthesia (1957-1967) in Mississippi

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THE STUDY OF MATERNAL mortality as it relates to a particular medical discipline has always been of interest to the alert physician in his quest for medical excellence. The Maternal and Child Care Committee of the Mississippi State Medical Association in conjunction with the State Board of Health reviewed its first case in 1957. During the period 1957-1967 (11 years) there were 681,081 live births in the state and 542 maternal deaths, a maternal death rate of 7.9/10,000 live births. This report is concerned with the nine maternal deaths (1.7 per cent) reported as directly related to anesthesia.

In 1968, Dr. Augusta Webster presented an analysis of maternal deaths in Cook County Hospital in Chicago during the period 1952-1965 (13 years). There were 226,878 live births and 234 maternal deaths, a maternal death rate of 10.3/10,000 live births. Of particular interest is the fact that there were eight maternal deaths (3.4 per cent) directly related to anesthesia.¹

Both Bonica and Eastman in their excellent textbooks note that anesthesia usually accounts for 5 to 10 per cent of maternal deaths, yet in our series and two others that are comparable, we find that all three are lower than these estimates.^{2, 3}

The author compares the circumstances of maternal deaths related primarily to anesthesia in Mississippi, North Carolina, and Chicago's Cook County Hospital. He discusses usage of spinal block and general anesthesia and points out special complications to watch for.

*Maternal Deaths
Primarily Related to Anesthesia*

State of Mississippi	1.7 per cent
Cook County Hospital, Chicago	3.4 per cent
North Carolina ⁴	2.9 per cent

It is of interest to speculate on the reasons for this difference:

(1) All three areas, Cook County Hospital,

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MATERNAL MORTALITY / Sherline

North Carolina, and Mississippi suffer from a chronic shortage of adequately trained personnel to fully provide obstetrical anesthesia. Thus, the use of anesthesia in obstetrical cases would most likely fall well below the national average.

(2) In Mississippi and North Carolina it would also logically follow that local infiltration and pudendal block would be employed in a high percentage of patients receiving anesthesia for routine deliveries outside of the larger hospitals. This would tend to reduce the complication rate. This is also true in the Cook County Hospital series, where medical students and interns manage a great number of the deliveries.

Another corollary of this shortage of anesthesiologists, however, is that other physicians, nurses, and ancillary personnel must extend themselves and the complication rate for those cases administered anesthesia by this relatively inexperienced group could be expected to be higher. The source of anesthesia for the Mississippi series is outlined in Table 1. In only one case was an M.D. anesthesiologist in consultation.

INADEQUATE CASE FINDING

(3) Lack of adequate case finding could be implicated. In the state of Mississippi the only formal source of cases is the death certificate. If the fact that the patient was pregnant or recently pregnant is not recorded, the case may be missed.

(4) Maternal mortality review is through a questionnaire submitted to the attending physician. Often the questionnaire is not fully completed and maternal deaths as a result of anesthetic complications might not be recorded. In 1966, 26 per cent of the replies (8 cases) were not satisfactory for review. Individual hospital charts are not reviewed and the attending physician is not interviewed.

TABLE 1
SOURCE OF ANESTHESIA
(MISSISSIPPI)

M.D. anesthesiologist	1
M.D.	6
Nurse	1
Not stated	1

The Cook County Hospital and the Mississippi series are quite comparable in type of anesthesia, obstetrical indications and the complications encountered. In Mississippi there were six

deaths related to spinal block and three to general anesthesia. Five deaths were related to cesarean section, two to vaginal delivery and two to sepsis complicating abortion (Table 2). The very similar Cook County Hospital statistics are presented in Table 3.

Regional and general anesthesia in pregnancy present some special problems. Usually they can be avoided if they are anticipated, but prompt recognition and proper management of difficulties that do arise usually prevent serious complications. The most important of these problems are discussed below.

SPINAL ANESTHESIA

Standard spinal block anesthesia in the United States for both vaginal delivery and cesarean section is a single injection hyperbaric technique using a single anesthetic agent with a vasoconstrictor if prolongation of the block is necessary. One death in the Mississippi series was related to use of an isobaric continuous technique using a mixture of drugs.

Drug dosage for obstetrical spinals has been established at two-thirds to three-fourths of the dose used in the non-pregnant patient (Table 4). Failure to stay below the maximum recommended figures will lead to high levels inappropriate for the procedure.

The block established with procaine cannot be expected to last more than 45 minutes. It is thus unacceptable for most cesarean sections. Lidocaine, when combined with phenylephrine 3 mg., will maintain an adequate level for only 60 to 75 minutes and should only be used if the procedure can be safely completed within that time limit. Both tetracaine and dibucaine should maintain the level of anesthesia long enough for the average operator to finish a cesarean section without difficulty.

HYPOTENSIVE COMPLICATIONS

Hypotension is the most common complication with spinal anesthesia in pregnancy, even when staying within the recommended dose levels. The percentage of cases having significant hypotension (below 100 mm Hg systolic or two-thirds the preblock level) will rise as the block level rises. An appropriate level for a vaginal delivery is T10-12, and at that level about 18 per cent will have some hypotension. If the level rises to T4, 85 per cent may be expected to have some hypotension.⁵

The etiology of this hypotension as related to anesthesia in the obstetrical patient is usually either vena caval and aortic occlusion or sympa-

TABLE 2
ANESTHESIA DEATHS IN MISSISSIPPI, 1957-1967

<i>Anesthesia</i>	<i>Year</i>	<i>Indication</i>	<i>Anesthesia Time</i>	<i>Cause of Death</i>
Spinal	1957	Vag. del.	30 min.	Cardiac arrest
	1959	C-section	2 hrs.	Cardiac arrest
	1959	C-section	2 hrs., 30 min.	Cardiac arrest
	1960	C-section	5 min.	Cardiac arrest
	1960	Vag. del.	30 min.	Cardiac arrest
	1962	C-section	30 min.	Cardiac arrest
General	1958	Abortion	?	Cardiac arrest
	1958	C-section	1 hr., 45 min.	Aspiration pneumonia
	1965	Abortion	?	Cardiac arrest

thetic block and peripheral vasodilatation in a patient with a borderline or depleted intravascular volume. Other causes of hypotension such as anaphylaxis should always be kept in mind, however.

All physicians administering spinal anesthesia must be prepared to find and treat post-block hypotension by following a predetermined regime. First, extremely close monitoring of the patient is necessary. Post-spinal anxiety and nausea and vomiting must be correctly interpreted as most likely due to rapid change in blood pressure. Hypotension can occur at any time after the block is administered, and simply because the medication has "set" and the level stable does not mean vigilance can be lessened. If personnel are not available to monitor the block closely, the wisdom of using this form of anesthesia must be seriously questioned. Cardiac arrest rarely arises without warning but only after a period of hypotension and decreased cardiac and brain perfusion.

AUTOMATIC RESPONSE

When hypotension is detected, the response should be automatic:

1. **Increase the rate of infusion of intravenous fluids.** Although 5 per cent Dextrose in water is the fluid used most commonly, its effect on blood pressure is extremely transient. Ringers lactate solution is better because it will support blood pressure extremely well.

2. **Left uterine displacement, either manually or by tilting the patient onto her left side.** Alternating sides every two minutes until the block has set will help insure an equal take.

If the blood pressure does not respond immediately and reach 100 mm Hg after 30-40 seconds of left uterine displacement and/or 200-300 cc of Ringer's lactate, the following additional steps will be needed:

3. **Straight leg raising.**

4. **Maternal oxygen.**

5. **Lastly, vasopressors, preferably methentermine or ephedrine.** Both of these agents are cardiac stimulators and probably do not decrease peripheral perfusion. Methoxamine, phenylephrine and levarterenol are contraindicated in the obstetrical patient. They produce their blood pressure effect primarily by peripheral vasoconstriction and not cardiac stimulation. This reduces uterine blood flow and decreases placental perfusion. A fetus already in jeopardy may be unable to compensate and may either expire or develop hypoxia and cerebral damage.

RESPIRATORY DEPRESSION

Post-spinal respiratory depression is closely related to drug dosage, block level and airway management. Slight depression will require maternal oxygen. More serious depression of respiration or apnea will require ventilatory support. This can quite often be given by mask with assisted or controlled ventilation with the gas anesthetic machine. The normal progression of ventilatory support would be mask, then mask and pharyngeal airway, and if respiratory obstruction is still present or exchange inadequate, endotracheal intubation. Because of the unpredictability of complications following regional anesthesia the physician utilizing these techniques must have immediately available and be proficient in the use of masks, laryngoscope, endotracheal tubes, and a source of positive pressure oxygen (preferably a standard gas anesthesia machine). He must also be thoroughly familiar with those anesthetic techniques and drugs which are necessary to prevent an anesthetic catastrophe.

GENERAL ANESTHESIA

Utilization of general anesthesia by whatever technique also implies an intimate knowledge of

obstetrical anesthetic indications, contraindications and techniques.

Once labor has begun, it must be assumed that digestion stops and that whatever is already in the stomach, or is placed there subsequently, will stay there. We are sometimes lulled into a sense of false security as in a case recently reported in which an apparently properly prepared obstetrical patient undergoing cervical circlage for an incompetent cervix aspirated gastric juice and had a prolonged and stormy recovery.⁸ All obstetrical patients must be presumed to have either fluid or solid gastric contents. Endotracheal intubation will afford the safest anesthesia when surgical planes of general anesthesia must be used.

COMBINED TECHNIQUES

Flowers makes a strong plea for combined pudendal block and general analgesia rather than general anesthesia alone.^{9, 10} This technique utilizes low concentrations of nitrous oxide and methoxyflurane for minimal newborn and maternal depression.

Many people feel that the continued use of cyclopropane in modern obstetrics must be seriously questioned. The explosive and aspiration hazards outweigh by far any advantage of speed that cyclopropane may have for obstetrical anesthesia. There is no mention made of exogenous epinephrine, oxytocin, atropine or succinylcholine

TABLE 3
COOK COUNTY HOSPITAL ANESTHESIA
DEATHS
(MATERNAL MORTALITY)

Anesthetic Technique	
Spinal	3
General	3
Combined (Spinal/General)	2
Obstetrical Indications	
Cesarean section	5
Vaginal delivery	2
Laparotomy	1
Appendectomy	1

in the protocols of the patients that died when cyclopropane was being used. Any of these drugs in combination with cyclopropane, particularly when associated with an increased arterial partial pressure of CO₂, increases the risk of cardiac arrhythmia and possible ventricular fibrillation.

TABLE 4

USUAL AND MAXIMUM SAFE DOSAGES OF
VARIOUS LOCAL ANESTHETIC AGENTS
IN OBSTETRICAL SPINAL ANESTHESIA

Agent	Vaginal Delivery	Cesarean Section
Procaine	40-60 mg.	Not rec.
Tetracaine	3-5 mg.	6-8 mg.
Lidocaine	25-50 mg.	75-100
Dibucaine	2.5-4 mg.	4-5 mg.

Modified from Hingson, R. A., and Cull, W. A.⁶

CONCLUSIONS

Why is the state of Mississippi below the expected national maternal mortality rate from anesthesia? Why were there no mortalities in the last two years of the study? Lack of reporting may be a factor but improved care by informed physicians must also be considered. The Mississippi State Medical Association and the Mississippi Academy of General Practice must be commended for their continuing effort in graduate medical education for the practitioners of the state. ★★★

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Resuscitation of the Newborn

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ONE OF THE TWO most common causes of death in the first day of life is asphyxia. The other cause, which is intimately related, is prematurity. In combination, these two causes alone account for over two-thirds of the deaths in the first week of life. Time is of the essence to a critically ill newborn who is attempting to make the transition from his previous, totally dependent, intra-uterine state to a totally independent, extrauterine state. Thus an understanding of some of the factors leading to fetal and neonatal asphyxia, and a plan of action for resuscitation of the asphyxiated infant may be helpful in reducing the neonatal mortality and the central nervous system morbidity rate from asphyxia.

In the past few years much information has been gained regarding maternal and fetal physiology, especially as it relates to the influence of labor on the fetus and the newborn. This information, which was recently reviewed by Dr. M. E. Towell, has been helpful in understanding some of the mechanisms of fetal and neonatal asphyxia.¹

Throughout a normal gestation up to the beginning of labor, the fetus is in a state of adequate oxygenation and not in a state of hypoxia, as was previously thought. As normal labor progresses, a mild hypoxia, hypercarbia, and acidosis develops. This alteration of the acid base and blood gas status of the fetus is related to the intermittent interruption of adequate perfusion of the placenta during normal uterine contractions. It is not difficult to understand how deranged maternal, placental, or fetal physiology superimposed on the normal biochemical asphyxia of labor may significantly reduce the "marginal" oxygenation of the fetus and produce increasing de-

grees of asphyxia. Table 1 is a list of common conditions of the mother, placenta and fetus which may significantly alter the newborn's ability to remain oxygenated and may set the stage for

The most common causes of death in the first day of life are asphyxia and prematurity. The two are intimately related and together account for over two-thirds of deaths in the first week of life. The authors explain factors leading to fetal and neonatal asphyxia and set forth a plan of action for managing resuscitation of the asphyxiated infant.

fetal or neonatal asphyxia. Although occasionally the delivery of an unexpected depressed or asphyxiated infant occurs, these times should be few. Thus, long before the actual delivery, many of the infants who are "at risk" for developing asphyxia and who may require early delivery and resuscitation at birth can be identified.

The respiratory, cardiovascular, and biochemical responses during asphyxia and resuscitation have been well studied in the newborn Rhesus monkey.² These responses closely resemble those seen in the infant who does not breathe at birth. During the initial phase of experimental asphyxia in the monkey, there is a period of primary hyperpnea lasting 2-3 minutes followed by a period of primary apnea, lasting approximately one minute. These two periods are then followed by a prolonged period of rhythmical gasping, at first very deep, then gradually becoming more shallow and finally ceasing approximately 8.5 minutes after the onset of the asphyxia. Following this is the period of secondary apnea from which the animal will not recover unless resuscitation is begun.

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During this asphyxia, heart rate and blood pressure fall, leading to ineffective perfusion pressures, in approximately four to six minutes after the onset of the asphyxia. Both the acid-base and blood gas status of the animal change rapidly. The oxygen content falls to near 0 in 2.5 minutes. The carbon dioxide tension initially is 42 mm/Hg and rises approximately 10 mm/Hg per minute. The pH is 7.35 initially and during the early phases of asphyxia falls 0.1 units/minute. Thus at the end of an 8-10 minute period of asphyxia the pO_2 is near 0, pCO_2 approximately 120 mm/Hg and pH approximately 6.8.

RESPONSE PHASES

These responses closely resemble responses that can occur in the human fetus subjected to cord compression from any cause or to the newborn infant who does not breathe at birth. Frequently,

TABLE 1
CONDITIONS ASSOCIATED WITH
ASPHYXIATION OF INFANTS*

Maternal
Mechanical
Cephalopelvic disproportion
Abnormal uterine contraction
Multiple pregnancy
Prolonged labor
Malposition of infant
Difficult forceps delivery
Abnormal presentations
General
Diabetes
Toxemia
Hemorrhage and hypotension
Oversedation
Cardiorespiratory disease
Severe anemia
Grand multiparity
Juvenile pregnancy
Infection
Placental
Placenta previa
Abruptio placentae
Prolapsed cord
Infarction
Infection
Fetal
Erythroblastosis
Passage of meconium
Fetal bradycardia and tachycardia
Intrauterine infection
Prematurity

* From W. A. Hodson, Hospital Medicine, 1960.

the gasping phase of the asphyxia may occur in utero. The important aspect of this experimental data for clinical purposes in resuscitation is the linear relationship between the duration of asphyxia and the recovery of respiratory function following resuscitation. For every minute, after the last gasp that resuscitation is delayed, there will be a two minute delay in onset of gasping and a four minute delay in the onset of rhythmical breathing. It can readily be seen that time is of the essence if the apneic newborn is to be saved without brain damage. Thus, it is imperative that all medical personnel in the delivery room and nursery be extremely familiar with the plan of action for resuscitation. This includes the constant availability of needed resuscitation equipment and oxygen.

EVALUATION OF INFANT AT BIRTH

During the first minute after birth there should be a routine followed in evaluating every baby. Immediately on delivery the infant's head should be held down and the oropharynx should be suctioned prior to the first breath. After cord clamp, he should then be placed supine in a warm environment, with repeated gentle suction of the oropharynx. Nothing more than light slapping of the feet should be used in stimulating the infant to breathe.

By the end of the first minute auscultation of the heart should be done so that the one minute Apgar score can be determined. On the basis of the Apgar score, the need for further resuscitative measures can be determined. Table 2 is an outline of the Apgar scoring system.³ In a large series of infants, 17,221 under study by the Collaborative Project on Cerebral Palsy, the Apgar scoring system at one and five minutes was used.⁴ The following distribution was seen for the one minute scores; 0-3, 6.7 per cent; 4-6, 14.5 per cent; 7-10, 78.9 per cent. By five minutes, there were fewer infants with low scores: 0-3, 1.8 per cent; 4-6, 3.5 per cent; 7-10, 94.8 per cent. When the entire series is broken down by specific birth weights, a high percentage of infants weighing 1500 grams or less had lower one and five minute Apgar scores than heavier babies. There was a positive correlation between neonatal mortality rates and neurologically abnormal infants at one year with low five minute Apgar scores.

Although there have been many abuses and misuses of the Apgar scoring system since its initial description in 1953,⁵ it still remains the single most rapid and reproducible scoring system of the infant's status in the immediate postnatal period. In Dr. Apgar's words,⁶ "Nine

TABLE 2
ACRONYM OF THE APGAR SCORE*

Sign	Score		
	0	1	2
A Appearance (color)	Blue; pale	Body pink; extremities blue	Completely pink
P Pulse (heart rate)	Absent	Below 100	Over 100
G Grimace (reflex irritability response to stimulation of sole of foot by glancing slap)	No response	Grimace	Dry
A Activity (muscle tone)	Limp	Some flexion of extremities	Active motion
R Respiration (respiratory effort)	Absent	Slow; irregular	Good strong cry

* From Butterfield and Convey, J.A.M.A. 181:353, 1962.

months' observation of the mother surely warrants one minute observation of the baby."

INITIATION OF RESPIRATION

As mentioned previously, the process of normal labor and delivery produces a mild biochemical asphyxia. The increasing CO₂, decreasing pH, and decreasing oxygen acting on the medullary respiratory center and the peripheral chemoreceptors, play a major role in initiating respiration. Thermal and tactile stimuli also play a role in initiating respiration but are thought to be of secondary importance. In most infants, the first breath is usually within a few seconds after birth. During these first few breaths, negative pressures between 20 and 70 centimeters of water have been recorded. With these negative pressures, the lungs rapidly expand and the functional residual capacity of the newborn lung reaches three-fourths of its normal value during the first few breaths.

RESUSCITATION

For practical purposes of identifying infants who may require special resuscitative measures, the infants are divided into three groups by their one minute Apgar score: 7-10, 4-6, and 0-3. The management for each of these groups will be described.

A. Infants with Apgar score 7-10

As was seen from the previous study,⁴ the majority of newborns had Apgar scores of seven or greater. These infants should require no more than gentle oropharyngeal suction with a Delee trap or a bulb suction.

After the initiation of cry and respirations, the infant should be dried and wrapped in a warm blanket to insure maintenance of normal body temperature. Drops in temperature should be avoided to prevent the severe consequences of

cold stress, which may be a marked metabolic acidosis and an increase in oxygen consumption.^{7, 8, 9, 10} This is particularly the case in a newborn who has had a period of in utero asphyxia or is depressed for other reasons. This infant may have an increased difficulty with maintenance of his body temperature, especially in a delivery room with an ambient temperature of 70°F. Skin temperatures may fall as much as 0.5°F/minute in this environment.¹¹ This fall in temperature is obviously accentuated if the wet newborn is not immediately dried and placed in a warm environment.

B. Infants with Apgar score 4-6

The largest group of infants requiring some form of resuscitation have Apgars of 4-6. They are usually pale or blue and have not established sustained rhythmic respirations. However, the heart beat is usually 100 or more. If the infant does not respond within 1½ minutes after birth following gentle oropharyngeal suction with the Delee trap or bulb suction and slapping of the feet lightly, additional measures should be instituted to prevent further asphyxia. A small plastic oral airway is placed in the mouth. By face mask, oxygen is delivered under 16 to 20 centimeters of water pressure. This is usually sufficient to expand the lungs and initiate respirations in a majority of infants in this group.

At this point, the heart rate can be used as the single best indicator of the success of resuscitation. If the heart rate picks up above 100, respirations usually begin. If the heart rate is below 100 and falling, the resuscitative procedure, outline for infants with a one minute Apgar score of 0-3, should be immediately instituted.

C. Infants with Apgar score 0-3

These infants are in serious trouble at birth and should have *immediate endotracheal intubation*.

Prior to the onset of positive pressure ventilation (PPV) the glottic and tracheal regions should be suctioned, being careful to remove any thick mucus or meconium. Positive pressure ventilation with 100% O₂ using pressures not to exceed 25 to 35 cm. of water should be instituted. As stated previously, the length of PPV required is proportional to the length of asphyxia. However, usually not more than 3-8 minutes of PPV is necessary. The endotracheal tube should be removed as soon as rhythmical respirations are sustained.

Cardiac massage is a technique that may be required in this group of infants whose heart rate is inaudible or remains below 60 beats per minute after ½ minute of assisted ventilation. With the method described under *Procedures*, aortic pressures of 60 to 80 per cent of normal can be obtained. Ventilation must be maintained during cardiac massage. A ratio of three massages to one insufflation is ideal.

TABLE 3

EQUIPMENT NECESSARY FOR RESUSCITATION

1. Suction catheter (#8 infant feeding tube)
2. Mouth or mechanical suction apparatus
3. Plastic infant oropharyngeal airway
4. Infant sized HOPE RESUSCITATOR (1 liter bag)
5. Rubber face mask
6. O₂ from wall outlet or portable tank with flow meter
7. Laryngoscope with infant blade (straight) with extra bulb and batteries
8. Endotracheal tubes (sizes 8, 10, 12)
9. Guide wire for endotracheal tube
10. Syringe and needles
11. Drugs
 - 7.5% sodium bicarbonate
 - Aqueous adrenalin 1:1000
 - Dextrose solution 10% and 50%
 - Nalline®

Fluids and drugs have a valuable role in resuscitation and frequently are needed in resuscitation in this group of infants. However, it must be stressed emphatically, there is no substitute for PPV with 100 per cent oxygen. Without adequate oxygenation of the myocardium and the respiratory center in the brain stem, fluids and drugs are ineffective. A list of the useful fluids and drugs and their dosages are given in Table 3.

1. Sodium Bicarbonate: As previously stated, with severe asphyxia (Apgar score 0-3), there is acidosis, bradycardia, hypotension and at times cardiac arrest. This clinical condition may be pres-

ent at birth or develop in an infant, Apgar score 4-6 who did not respond to the initial resuscitative measures. Thus if the Apgar score remains three or less after positive pressure ventilation, 7½ per cent sodium bicarbonate (4 cc/kgm) diluted with equal amounts of 10 per cent glucose, should be given through the umbilical vein or artery catheter. This should be done while continuing positive pressure ventilation with oxygen and continuing external cardiac massage. If there is still no response, half of the initial dose of sodium bicarbonate should be repeated. Without the aid of pH determinations continued sodium bicarbonate should be given with caution.

2. Adrenalin: If after the above measures, the heart rate is still below 50, 0.1-0.2 cc. of aqueous adrenalin 1:1000 diluted in 10 cc. 10 per cent glucose should be given I.V. No more than two doses of adrenalin should be used.

3. Dextrose Solution: In severely depressed infants who have not responded to the above measures, 1-2 cc/kgm of 50 per cent glucose diluted with equal parts of 10 per cent glucose should be given through the umbilical vein or artery over a 3-5 minute period. Glucose solution is given in the event that hypoglycemia may be contributing to the clinical picture of severe depression. This may be the case in infants who show signs of post-maturity or infants who are low birth weight for gestational age.

4. Nalorphine HCL USP (Nalline®): The use of narcotic antagonists does not play a prominent role in resuscitation. Nalline® 0.1 mgm/kgm diluted in 2 cc. of D₁₀W I.V. should only be administered to a severely depressed infant whose mother is clearly known to have had analgesic administration shortly before delivery. It should be re-emphasized that drug administration does not take the place of PPV with oxygen.

5. Blood: There is no substitute for blood when one has clinical evidence of shock, which in the newborn as in the older child is manifested by extreme pallor. This may be suspected when there has been a history of excessive vaginal bleeding or multiple births, with one twin transfusing the other. In case of emergency, blood from the mother can be used, without cross matching, in the amount of 10 cc/kgm infused into the umbilical vein. If there has been blood loss, blood should be given to boost the hematocrit to 40 per cent or above.

POSTRESUSCITATION CARE

Any infant who has required positive pressure by endotracheal tube should be treated as if he were at greater risk throughout his nursery period

than a child of an uncomplicated delivery. For the first 24 hours he should be observed extremely closely. The nursery staff should be prepared to reinstitute resuscitative measures at any time. Care should be taken to maintain the temperature between 36.5°C and 37.5°C. Oxygen may be required in the initial hours to reduce the infant's cyanosis. However, care should be taken not to continue oxygen longer than necessary because of the danger of oxygen toxicity to eye and lung.

Oral fluids should be withheld for the first six hours. However, parenteral fluids with glucose and sodium bicarbonate may be necessary to maintain both a normal blood sugar and acid base status. The gastric contents should be aspirated, especially if there has been excessive secretion or if there was a history of polyhydramnios. Vitamin K₁, 1 mgm I.M., should be given as in all routine deliveries, to prevent hemorrhagic disease of the newborn. Cultures of blood, cerebral spinal fluid, and urine along with a chest film and antibiotic therapy are indicated when infection is suspected. Usually infants requiring extensive resuscitation are started on prophylactic antibiotics. The antibiotics currently being recommended are aqueous penicillin G, 50,000 units/kgm/24 hours given in two divided doses I.M. or I.V.; and, Kanamycin 15 mgm/kgm/24 hours given in two divided doses I.M.

PROCEDURES

The procedures to be used are:

A. Endotracheal Intubation

With the infant supine, the neck is slightly hyperextended keeping the head in line with the body. Holding the head steady with the right hand, the laryngoscope is held in the left hand and the blade is inserted into the right corner of the mouth and advanced between the tongue and palate. As advancement is continued, the blade is gently moved to the midline and over the base of the tongue to the space between the base of the tongue and the epiglottis. Slight lateral pressure will move the tongue to the left of the oral cavity. With slight elevation of the tip of the blade the epiglottis is lifted to expose the glottis.

The entrance into the larynx will appear as a small vertical slit bordered posteriorly by the arytenoid cartilages. It is important not to overextend the neck as this will place excessive tension on the epiglottis thus facilitating its movement anteriorly. One can often obtain better visualization of the glottis by applying a counterforce over the thyroid cartilage with the fifth finger of the left hand.

After obtaining adequate visualization of the glottic area, any material such as blood, amniotic debris or mucus should be gently suctioned out. The endotracheal tube is then inserted at the corner of the mouth and the vocal cords until the "shoulders" of the tube are resting against the "false cords." The laryngoscope is then withdrawn and positive pressure ventilation is begun.

B. External Cardiac Massage

In order to insure maximum benefit from this procedure, it is necessary to have firm support beneath the infant's thorax. This can be provided by a lightly padded piece of plywood. Allowing for three to four "puffs" of ventilation to provide the alveoli with oxygen, the index and middle fingers of the right hand are placed in the midportion of the sternum just at the left margin. Enough force is applied to depress the sternum about one half to three fourths of an inch. The rate of massage should be about two "beats" per second or 120 "beats" per minute.

Ventilation and external cardiac massage should be performed alternately, in the ratio: three massages for each insufflation. Every five minutes one should pause long enough to evaluate the return of adequate cardiac function (heart rate > 100 and increasing strength of heart tones). External cardiac massage should continue until adequate cardiac function has returned. Force of compression may be roughly gauged by palpation of femoral or carotid pulses.

C. Umbilical Vein/Artery Catheterization

After sterile preparation of the umbilicus, a #5 radiopaque feeding tube, filled with sterile saline, is introduced into the umbilical vein. The catheter should be inserted approximately 8-10 cm. in infants > 2000 gms, and 6-8 cm. in infants < 2000 gms. A firm but gentle steady pressure usually places the catheter through ductus venosus into the inferior vena cava. Following the insertion it is advisable to obtain a portable x-ray of the chest to determine exact location; however, it is not necessary to wait for the x-ray before injection of needed medications, fluids or blood in the delivery room.

If medications are used, the concentration should be diluted before injection as indicated under drug therapy. If the catheter has entered one of the hepatic veins and not advanced into the inferior vena cava, the injections of hypertonic solutions such as 50 per cent dextrose or 7.5 per cent sodium bicarbonate may cause localized hepatic necrosis. The authors attach a 3-

way stopcock to the umbilical catheter to allow continuous intravenous fluid administration along with possible intermittent blood sampling, yet still maintaining a closed system at all times.

The umbilical venous catheter should rest in the inferior vena cava. If the catheter has been advanced too far, withdrawal of a few cm. should be done. However, if the catheter is in one of the hepatic veins or even if it appears to have entered the portal vein and not into the inferior vena cava, it should be withdrawn entirely and replaced, unless sterile technique has not been broken, wherein it may be simply readvanced. If there is any doubt, withdraw the catheter and replace it again under a new sterile prep and drape. Sepsis of the newborn can easily be produced by a break in the sterile technique of umbilical vein insertion. The umbilical venous catheter is usually continued for 12-24 hours after the immediate period of resuscitation for intravenous fluid administration. If the infant is stable and tolerating p.o. glucose water or formula at the end of this time, it can safely be discontinued. If the catheter is left in for longer than 24 hours, many centers start the infant on prophylactic antibiotics (see drugs).

The same sterile techniques for umbilical artery insertion should be followed. The tip of the catheter should come to rest in the aorta just above the renal artery. This catheter can be used for arterial blood sampling for pH, $p\text{CO}_2$ and $p\text{O}_2$. It must be emphasized that difficulties have been observed in infants following umbilical artery catheterization.¹² The placement of a catheter in this vessel should be done only if arterial blood sampling for pH, $p\text{CO}_2$, and $p\text{O}_2$ determination is planned.

MANAGEMENT PLAN

A plan of action for management of the severely depressed newborn is as follows:

(1) Place infant supine under a radiant warmer in head down position with a slight lateral tilt.

(2) Gently suction oropharynx and dry infant.

(3) Insert endotracheal tube.

(4) Establish positive pressure ventilation through the endotracheal tube with mouth to tube ventilation.

(5) Cannulate the umbilical vein or artery.

(6) If HR does not increase to 100 beats per minute after 30 seconds of adequate ventilation, begin external cardiac massage.

(7) If at the end of three minutes from birth

or approximately 1½ minutes from onset of adequate ventilation and external cardiac massage, the heart rate is not above 100 beats per minute, a sterile solution of 7½ per cent sodium bicarbonate (4 cc/kgm) diluted with equal parts of 10 per cent glucose is injected through an umbilical vein catheter.

(8) If the heart rate remains below 50, give 0.1 cc. aqueous adrenalin 1:10,000 concentration followed by 1-2 cc/kgm of 50 per cent dextrose solution diluted with equal parts of 10 per cent Dextrose through the umbilical catheter.

(9) Adequate ventilation and external cardiac massage must be continued throughout the entire time of drug administration until adequate spontaneous ventilation and cardiac activity is assumed.

(10) Transfer the infant to the nursery for intensive care. ★★★

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The authors wish to thank Dr. Donald Sherline from the Department of Obstetrics and Gynecology for his helpful comments.

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MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Convention, Nov. 29-Dec. 2, 1970, Boston. Annual Convention, June 20-24, 1971, Atlantic City. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Southern Medical Association, 64th Annual Meeting, Nov. 16-19, 1970, Dallas. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

STATE AND LOCAL

Mississippi State Medical Association, 103rd Annual Session, May 3-6, 1971, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Mississippi Academy of General Practice, Annual Assembly, Oct. 20-22, 1970, Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Robert P. Henderson, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday, April and First Wednesday, November, 2:00 p.m., Clarksdale. Walter T. Taylor, P.O. Box 1237, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. C. Hal Cleveland, P.O. Box 1018, Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Howard A. Nelson, 308 Fulton St., Greenwood, Secretary.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Res-

taurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. James E. Booth, Eupora, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. M. Howell, 139 Kirkwood St., Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, June, September, and December. Donald E. Dore, Singing River Hospital, Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. W. B. White, Medical Arts Bldg., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.

Radiologic Seminar XCVIII

Duplications of the Renal Pelvis and Ureter

T. S. McCAY, M.D.
Jackson, Mississippi

IN THE NORMAL COURSE of embryologic development a single ureteral bud arises from each wolffian duct. As development progresses, these ureteral buds become the right and left ureters. The cephalic ends of the ureters divide to produce the renal pelves, calyceal systems, papillary tubules and collecting tubules. Incomplete double ureter is formed when the ureteral buds divide too early or the renal pelvic division extends into the ureter. Duplications thus produced may vary from an exaggerated major calyx to the up-

per pole of a kidney to complete division of the renal pelvis with a divided ureter on the involved side. In duplications produced by this means, there will always be junction of the divided ureter proximal to the urinary bladder. Complete duplications develop when two separate ureteral buds arise from a wolffian duct giving rise to two entirely separate ureters with separate pelviocalyceal systems and separate vesical orifices. Either complete or incomplete duplication may be unilateral or bilateral.

Recognition of duplications of the upper renal tracts is usually dependent upon pyelography. Occasionally one may suspect duplication on the basis of elongation of a kidney on the plain radio-

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, St. Dominic-Jackson Memorial Hospital.



Figure 1. Ten minute film from an intravenous pyelogram. Note duplication on the left and small pelviocalyceal system on the right.



Figure 2. Tomographic study on the same patient demonstrating large upper pole segment of the right kidney with no apparent pelviocalyceal system.

graph, but pyelography, either intravenous or retrograde, is necessary for confirmation. Sometimes recognition of duplications by intravenous pyelography can be difficult when there is lack of function of the segment of kidney drained by the duplicated system. With retrograde pyelography, in cases of partial duplication, there may be obstruction of one of the duplicated ureters preventing filling. In complete duplications when all terminal orifices are not recognized and the connecting ureters opacified, the diagnosis may be missed. In this connection, it should be mentioned that frequently there will be an ectopic orifice of the ureter to the upper pole of the kidney opening into the vesical neck, the urethra, seminal vesicles, vas deferens, etc. in the male or into the vesicle neck, urethra, vestibule, vagina, etc. in the female. In cases where there is failure of opacification of the duplicated segment of the upper renal tract, pyelography will reveal a decreased number of renal papillae in the involved kidney.

Apart from academic interest, recognition of duplications is of considerable importance. As is the case with other organ systems with developmental abnormalities, disease states are more common than in the normally developed. Changes of obstructive uropathy are common in duplicated upper pole systems. Due to urine stasis, infections are more common in duplicated drainage systems and stones are also frequent. In females with complete duplication the ectopic upper pole ureter will not infrequently open below the level of the external sphincter giving rise to urinary incontinence. Ureterocele are often seen associated with ectopic ureteral orifices. Also, in cases of complete obstruction with failure of opacification of the duplicated system, one may be led to a mistaken diagnosis of tumor involvement of the involved kidney, the unopacified segment appearing as a renal mass. Furthermore, it is conceivable that a renal tumor could be present in an unopacified duplicated segment and be missed entirely.

The presented radiographs are those of a man who presented with right sided renal colic symptoms and hematuria. Intravenous pyelography (Figure 1) disclosed a duplicated left upper renal tract, while on the right the pelvicalyceal system appeared significantly smaller than the left, leading one to suspect duplication on the right with failure of function of the upper pole. A tomographic study (Figure 2) revealed a con-

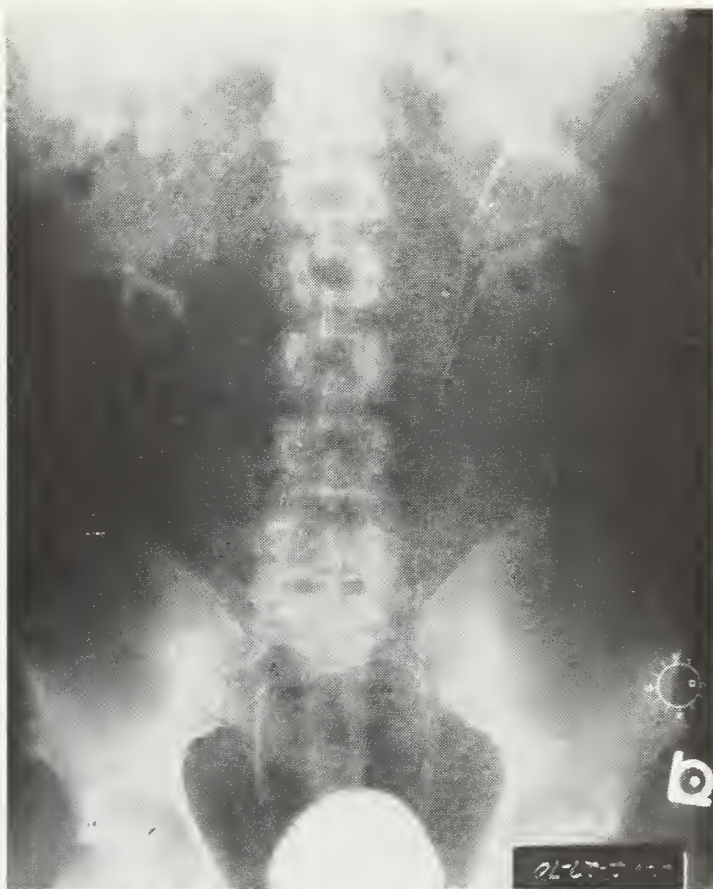


Figure 3. Repeat pyelogram after passage of calculus showing duplication bilaterally.

siderable segment of the upper pole of the right kidney lying above the pelvicalyceal system. Figure 3 is from a later study after passage of the calculus, demonstrating return of function to the duplicated right upper pole.

In summary, duplications of the renal pelves and ureters arise from abnormal divisions of the ureteral buds or from the development of supernumerary ureteral buds. Recognition of duplications is important since associated anomalies and associated pathologic conditions are more frequent than in normally developed excretory systems. Pyelography is the diagnostic procedure of choice in demonstrating these anomalies. ★★★

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MISSISSIPPI MEDICAL
POLITICAL ACTION
COMMITTEE

Proceedings of the House of Delegates

102nd Annual Session

May 11-14, 1970

Biloxi, Mississippi

THE 67th ANNUAL SESSION of the House of Delegates was convened during the 102nd Annual Session of the Mississippi State Medical Association, in pursuance to lawful notice given, on May 11, 1970, in the Fountain Terrace of the Hotel Buena Vista at Biloxi, Mississippi, at 9:12 o'clock in the morning, by Dr. James L. Royals, President. The invocation was spoken by the Rev. Elton Graves, pastor of the First Baptist Church, Biloxi.

After extending greetings, Dr. Royals presented the Vice Speaker, Dr. John B. Howell, Jr., of Canton and the Speaker, Dr. William E. Lotterhos of Jackson, who assumed the chair. Dr. Walter H. Simmons, Chairman of the Reference Committee on Credentials, reported the presence of a quorum of registered and seated delegates in accordance with Section 3, Chapter V, By-Laws of the association.

ANNOUNCEMENT OF REFERENCE COMMITTEES

Reports of Officers and Board of Trustees

M. Beckett Howorth, Jr., Oxford, Chairman
Thomas G. Barnes, Greenville
William M. Gillespie, Jr., Meridian
William F. Sistrunk, Jackson
E. T. Riemann, Jr., Gulfport

Medical Practices

Joseph B. Rogers, Oxford, Chairman
Louis A. Farber, Jackson
Clyde A. Watkins, Sanatorium
W. B. Howard, Pontotoc
Joseph B. Johnston, Mt. Olive

Miscellaneous Business

C. R. Jenkins, Laurel, Chairman
Ralph L. Brock, McComb
Robert P. Henderson, Jackson
Victor E. Landry, Lucedale
William H. Preston, Jr., Booneville

Credentials

Walter H. Simmons, Jackson, Chairman
Whitman B. Johnson, Clarksdale
Kenneth D. Terrell, Prentiss

Rules and Order of Business

Stanley A. Hill, Corinth, Chairman
Charles P. Bass, Columbia
James E. Alexander, Biloxi

APPOINTMENT OF TELLERS AND SERGEANTS-AT-ARMS

J. Dan Mitchell, Jackson, Chairman
G. Leroy Howell, Starkville
James M. Dabbs, Waynesboro

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

To assist the Speaker and Vice Speaker in the orderly conduct of the proceedings of this House of Delegates, your Reference Committee on Rules and Order of Business makes the following recommendations:

Conduct of Business. Under the By-Laws, the business of the House must be conducted according to *Robert's Rules of Order, Newly Revised*, and the Speaker and Vice Speaker should prescribe the order of business as set out in the By-Laws. To insure proper recording of the transactions, all delegates recognized should identify themselves. Except for distinguished visitors and those having official capacity in the association, unanimous consent should be obtained for extending the privilege of the floor to nonmembers of the House of Delegates. The report of the Reference Committee on Credentials should constitute the formal and official roll call of the House.

Reference Committees. The purpose of reference committees is for affording all members of the association an opportunity to discuss their views on matters under consideration by the House of Delegates.

HOUSE OF DELEGATES / Continued

Reports. All reports and resolutions presented should be referred to the appropriate reference committee by the chair immediately after their presentation, the only exception being those which are of such a nature as to require no further consideration and are, therefore, ready for decision by vote of this House. Reports published in the *Handbook of the House of Delegates* are considered to have been formally presented and should be referred to appropriate reference committees by the chair. Debate should be reserved on all such presentations until such time as the reference committees conduct formal hearings and when they report to the House.

Resolutions. To avoid burdensome tasks upon the reference committees and to insure that all members have adequate opportunity to discuss their views, the House should permit no introduction of resolutions after the present meeting except for (1) matters of an emergency nature, the validity of such emergency to be determined by majority vote, (2) matters relating to a scientific section of scientific work, and (3) proposed amendments to the Constitution and/or By-Laws which would then lie on the table for one year.

The report of the reference committee was adopted.

ADOPTION OF TRANSACTIONS

On motion by Dr. Lawrence W. Long of Jackson, second by Dr. H. C. Ricks, Sr., of Jackson, the Transactions of the 66th Annual Session of the House of Delegates, 101st Annual Session of the Association, May 12-15, 1969, published in Volume X, Number 8, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, August 1969, were adopted.

REMARKS OF THE SPEAKER

Dr. William E. Lotterhos: In order to maintain as much harmony in our House of Delegates as possible, your Speaker and Vice Speaker are governed by the majority opinion of the members of the House. What this majority wants and how it wants it to be done shall always remain the ultimate determination. However, it is the obligation of the Speaker to sense this will of the House and to preside accordingly, and we will hold our ruling ever subject to challenge from a reversal by the assemblage.

In cognizance with this concept, we are recommending that *Robert's Rules of Order, Newly Revised* be the basis for our parliamentary procedure, and we would call to your attention that according to the Constitution and By-Laws of our

state medical association that the up-to-date version will be our guide. Thanks to the framers of this wording, it does not require a constitutional change in order for us to do this. There are no rigid codifications of its rules in existence and in my opinion, parliamentary law serves to aid an assembly in orderly, expeditious, and equitable accomplishments of its desires. Any compulsory adherence to an inflexible set of directives may thwart rather than abet such an objective.

Once again, this year the Board of Trustees granted your Speaker and Vice Speaker the opportunity to publish the powers and duties of reference committees, and we trust that you will find it useful. If you have any comments, constructive or otherwise, please feel free to express yourself to help us keep this an up-to-date document. I will invite your attention to the fact that the reference committees will be the nucleus for discussion and deliberations on the issues that will help to set the future policies for our association. So, once again we make a plea for you to attend as many of the reference committees as you possibly can.

Perhaps the spotlight of this House of Delegates will be focused on our decisions in relation to the Himler Report. To my knowledge, this is the first time in the history of organized medicine that a request has come down from above actually to seek out the will of the component societies—to the very “grass roots” if you will. So I hope that you all have familiarized yourselves with the contents of this report, both the majority and the minority recommendations, and I will invite your attention to the very careful wording of definitions and descriptions. These are important, and I hope that we can give our delegates to the AMA some clear-cut decisions that will be carried back to our national meeting in June of this year, which is to be held in Chicago.

When it is a policy that has been determined by this House, our delegates are bound to this on the first balloting or expression when called upon to do so, but I think that it is important for you to know that our representatives do have the right to change that policy according to the best way that they see fit. If the one that they are supporting has been defeated or altered, I am sure that our delegates will convey to our national organization your wishes, and I have every confidence in their ability to make wise decisions when called upon to do so.

Before we get down to business, I would like to pause for a minute to pay our respects to a great Speaker, Dr. B. B. O'Mara, who will no longer be meeting with us in body, but I am sure that

his spirit will be among us. It is with fond recollection that I have cherished his wise counsel, and I can still feel the smarting after he had so ably chastised me when he thought it was appropriate. So I am going to take a special privilege of the chair and recognize Dr. B. B. O'Mara in memory, and ask that you all stand for a moment of silent prayer to honor this noble speaker.

REPORT OF THE REFERENCE COMMITTEE
ON REPORTS OF OFFICERS AND
BOARD OF TRUSTEES

Your reference committee thanks Dr. William E. Lotterhos, the Speaker of our House of Delegates, and his able colleague Dr. John B. Howell, Jr. of Canton, the Vice-Speaker, for their fair, impartial, and efficient conduct of our business in the House of Delegates. We appreciate his instructive remarks and the assistance which he and Dr. Howell have rendered to all members of the House and especially to the reference committees.

We approve the remarks of the Speaker, and recommend adoption by the House of Delegates.

Applause from the House of Delegates was given the report of the reference committee on the Remarks of the Speaker, and the report was adopted.

PRESENTATION OF DISTINGUISHED GUESTS

The Speaker presented the following distinguished guests:

Mr. Doyl Taylor, Chicago, Director, Department of Investigation, American Medical Association.

Mr. Leon J. Swatzell, Memphis, Assistant Director, Department of Field Service, American Medical Association.

Mr. Sam Cameron, Jackson, Assistant Executive Director, Mississippi Hospital Association.

Mr. Judge Hicks and Mr. John Sanders, student delegates, University Medical Center, Jackson. Mr. Hicks was accompanied by Mrs. Hicks who is also a medical student.

Mrs. Gerald D. Dorman, New York, wife of the President of the American Medical Association.

Mrs. James L. Royals, Jackson, wife of the President of the Mississippi State Medical Association.

ANNOUNCEMENT OF NOMINATING
COMMITTEE

Following a recess for caucuses by association districts, the Nominating Committee was announced:

Howard A. Nelson, Greenwood, District 1.

James O. Gilmore, Oxford, District 2.

Arthur E. Brown, Columbus, District 3.

S. Lamar Bailey, Kosciusko, District 4.

James Grant Thompson, Jackson, District 5.

William M. Gillespie, Jr., Meridian, District 6.

C. R. Jenkins, Laurel, District 7.

Sidney O. Graves, Jr., Natchez, District 8.

C. D. Taylor, Jr., Pass Christian, District 9.

Dr. Taylor was elected chairman of the committee which conducted an open meeting on May 13, 1970, and posted the nominations for the information of all members.

ADDRESS OF THE PRESIDENT

The Speaker declared the House of Delegates in open session, and the President, Dr. James L. Royals, delivered his address. The address has been published separately in Volume XI, Number 7, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, July 1970.

REPORT OF THE REFERENCE COMMITTEE
ON REPORTS OF OFFICERS AND
BOARD OF TRUSTEES

We applaud and commend Dr. James L. Royals, our 1969-70 President, for his service to our association and for his address to this House of Delegates. We feel that Dr. Royals has challenged us to continue to improve the quality and delivery of medical care in Mississippi.

We invite the attention of the House of Delegates to the final paragraph of his splendid address:

"The delivery system is on trial. Our circumstances are neither simple nor easy, but the challenges are great and the gauntlet is down. Let us do what we must to insure the best medical care for all Mississippians and for all Americans."

Your reference committee further invites attention to another poignant quote from Dr. Royals' address:

"The most tragic hour in American medicine comes when a physician withdraws himself in spirit and substance from medical organization. He renders himself impotent and he chips a stone from our foundation. The whole is never greater than the sum of its parts, and no man is an island. His dissent should not be translated into destruction of his organization, of his colleagues, or of himself. He simply does not have that right."

Your committee associates itself in the comment of our speaker when he said that Dr. Royals has honored the office which sought to honor him.

We approve the address of the President and ask that it be published in the JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION.

In approving unanimously the report of the ref-

HOUSE OF DELEGATES / Continued

erence committee, the House of Delegates accorded Dr. Royals a standing ovation.

SPECIAL ADDRESS

Dr. Gerald D. Dorman of New York, President of the American Medical Association, addressed the House of Delegates as the principal speaker of the 102nd Annual Session.

REPORT OF THE DELEGATES TO AMA

Reporting Format. Your Delegates to the American Medical Association continue to limit their joint report to this House of Delegates to key policy actions at the annual and clinical conventions. Because of excellent and detailed reporting in the *American Medical News* and *Journal AMA* of scientific and subsidiary activities, these aspects would only be needless repetitions and duplications.

Dr. G. Swink Hicks of Natchez completed his first full term of two years in 1969 and began serving his second term to which he was re-elected in 1969 on Jan. 1, 1970. The senior Delegate, Dr. Howard A. Nelson of Greenwood, will complete his second full term during the current year. Our able Alternate Delegates are Drs. Stanley A. Hill of Corinth and Joseph B. Rogers of Oxford.

The present reporting covers the 118th Annual Convention at New York, July 13-17, and the 23rd Clinical Convention at Denver, Nov. 30-Dec. 3, both 1969. We are grateful for the attendance, participation, and support at these meetings of our president, Dr. Royals, and our president-elect, Dr. Brumby. Many other Mississippi physicians attended and participated in these conventions, contributing to scientific and business activities.

New York Annual Convention. The House of Delegates considered 59 reports and 137 resolutions, meeting in formal session about 16 hours over four days. Distinguished speakers included Vice President Agnew and Dr. Roger O. Egeberg, Assistant Secretary of HEW for Health and Scientific Affairs.

Major items of business and policy included peer review, health care of the poor, medical care as a matter of right, Medicare and Medicaid, relations with hospitals, laboratory advertising and billing, sex education, and internal organization and finances of AMA.

The House moved decisively on peer review, encouraging full and complete participation and implementation at all levels of medical organization. The House stated that it "knows of no

greater challenge facing the profession today than to secure universal acceptance and application of the peer review concept. . . ." The action made it clear that should medicine fail in meeting this challenge, the task will be done for us and not on our terms.

In this same connection, the delegates recognized the physician's influence on the cost of care, stating that "the doctor has a significant and responsible role in any organized effort to control health care expenditures." With specific reference to Medicare and Medicaid, the House took four major actions:

—Expanded peer review at component society level to reduce hospital and extended care facility stay and to expand ambulatory care.

—Eradication by the profession of isolated abuses by physicians.

—Promotion of innovative health service delivery systems for low income communities.

—Preservation of care quality in the face of cost containment measures.

But in the matter of Social Security Administration fee freezes, the House said that the setting of "rigid limits on levels of payments to physicians who provide services appear in contradiction to Congressional intent" that these patients receive care on the same basis as private patients. A call was made for the Congress to reassess its intent and priorities in relation to Title XIX.

The AMA again asked for the identities of physicians said to have abused Medicare and Medicaid and condemned the practice of release by government agencies of gross amount paid to individuals and groups under the programs without further explanation, giving a frequently false impression of abuse.

Your Delegates introduced a resolution in response to the mandate given us in Resolution No. 3, subject: JAMA Laboratory Advertising, at our 101st Annual Session. A number of similar resolutions were introduced by other states. Despite diligent and persistent effort, the House concurred with the Judicial Council's views that the advertising pages of *Journal AMA* cannot be denied a lawful activity, including independent laboratories with industrial sponsorship.

The frequently discussed and sometimes misunderstood position on medical care as a right was clarified to the extent of a policy statement:

—That it is a basic right of every citizen to have available to him adequate health care.

—That it is a basic right of every citizen to have free choice of physician and institutions in obtaining medical care.

—That the medical profession, using all means

at its disposal, should endeavor to make good medical care available to each person.

A preliminary policy on health care of the poor states that comprehensive services in this connection are desirable, that it must be a long-range, continuing program, that research on unmet needs which is documented should be implemented, that the poor should participate in planning at community level, and that physicians should work with organizations in and out of medicine where concern for care of the poor has been expressed.

The Scientific Assembly was reorganized with the several specialty societies having been given a stronger voice in the affairs of their respective sections. Each of the 24 scientific sections is to be governed by a section council whose members are selected by the appropriate specialty society. The new format becomes effective Jan. 1, 1972.

By-Laws relating to membership eligibility were amended to permit qualified osteopaths to become full, active members. While conceding that the primary responsibility for family life education is in the home, the House "supported in principle the inauguration by State Boards of Education or school districts, whichever is applicable, of a voluntary family life and sex education program at appropriate grade levels." The House supported the integrity of hospital medical staffs in self-government, having previously endorsed the concept of voting membership on hospital governing boards for physicians.

The financial picture for AMA is not bright with mounting costs, broadened areas of activity, and about \$4 million due in federal income taxes on advertising. We foresee a dues increase to \$100 per year effective in 1971.

At the New York convention, the House of Delegates took a unique action, electing a number of senior state medical association and national specialty society executives to membership in AMA. Our Executive Secretary, Mr. Rowland B. Kennedy, was among them.

Denver Clinical Convention. Major actions at the Denver Clinical Convention included conclusive actions on health care of the poor, long-range planning for AMA, discontinuation of the AMA-ERF Institute for Biomedical Research, a statement of policy on marijuana, private practice, governmental delivery programs, and costs of medical care. The House of Delegates acted on 99 items of business among which were 33 reports and 66 resolutions.

In taking definitive actions on health care of the poor, the House reaffirmed its policy on medical care as a basic right, calling for increased funding of effective government programs, proj-

ects to eliminate unfavorable environmental conditions, increased physician services in the urban slums, expansion of health careers by recruitment from disadvantaged areas, better prenatal and postnatal care, family planning services, a crack-down on quackery which exploits the poor, improved mental health services programs, and more participation in AMA activities by minority group physicians.

The Report of the Committee on Planning and Development for AMA (Himler Report) was received formally by the House of Delegates. Instead of generating the anticipated controversy, the report was discussed and handled with little fanfare. The House established an *ad hoc* committee to receive the report, to recommend methodology for a permanent committee, and to send the report to state associations requesting resolutions for consideration at the 1970 annual convention.

After years of discussion and debate, the House of Delegates adopted as policy that "cannabis (marijuana) is a dangerous drug and as such is a public health concern. It is a psychoactive substance which can have a marked deleterious effect on individual performance and social productivity. A significant number of exposed persons become chronic users with concomitant medical and interpersonal problems."

The House stated that the sale of marijuana should not be legalized, saying that if potency were legally controlled, predictably there would be an illicit market for the more powerful forms.

The AMA-ERF Institute for Biomedical Research, called a noble experiment, was discontinued because of high costs. The House could find no way to construct a permanent building for the Institute, and there were no outside funds available to assist AMA in supporting the multi-million dollar activity.

The House created a Committee on Private Practice, assigning it to the Council on Medical Service. A proposal to establish a new Council on Private Practice was not favorably considered. Support for the Regional Medical Programs under PL 89-239 was reaffirmed, but the delegates opposed on-site auditing of physicians' accounts in their offices by government representatives. Federal licensure was opposed, but state associations were urged to work with legislatures to strengthen licensure laws. Physicians were asked again to be mindful of care costs, as concern was expressed over the ever-increasing costs of hospital care. The Medcredit concept for voluntary national health insurance was endorsed.

State medical associations were encouraged to make active membership available to residents

HOUSE OF DELEGATES / Continued

and interns (a benefit available in Mississippi), and dialogue with medical students was recommended.

Expression of Delegates. Your AMA Delegates express their appreciation to our own House of Delegates, to the Board of Trustees, and to the general officers for support and the maintenance of continuing communication. We sit with the Board at all meetings and are thereby enabled to be fully informed on all policy developments and positions. We pledge our best effort in representing your wishes, desires, and policies in the AMA House of Delegates.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Drs. Howard A. Nelson of Greenwood and G. Swink Hicks of Natchez have provided us with a concise and informative report of the two conventions of the American Medical Association at which they represented us during 1969. We appreciate the work of our delegates and their service to the association and recommend adoption of their report.

The Speaker invited attention to the portion of the report pointing out that Mr. Rowland B. Kennedy, the Executive Secretary, had been elected an Affiliate Member of the American Medical Association by its House of Delegates during the 1969 New York annual Convention. The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

101st Annual Session. At the 1969 annual session, the House of Delegates approved two amendments to the By-Laws of the association, both with reference to committees.

Section 2, Chapter IX, was amended to accord constitutional status to the Committee on Blood and Blood Banking as a permanent committee of the Council on Medical Service. This action did not, however, confer a vote in the House of Delegates on the committee members, since only elected officers, Trustees, and council members have the vote.

Section 2, Chapter VI, was repealed as regards a new nominating procedure instituted in 1968. The traditional method of making nominations was restored and will be followed during the present annual session.

Two proposed amendments to the By-Laws at the 1969 annual session failed. One was to make

the Speaker and Vice Speaker of the House of Delegates *ex officio* members of the Board of Trustees without vote and the other would have empowered the Speaker and Vice Speaker to appoint reference committees.

102nd Annual Session. There are no pending amendments to the Constitution or By-Laws lying on the table. The council will stand in readiness to consider any amendments which are proposed at the present annual session.

The report of the council was received for information.

REPORT OF THE COUNCIL ON SCIENTIFIC ASSEMBLY

Organization and Duties. The Council on Scientific Assembly is a constitutional body of the House of Delegates, charged with the responsibility of planning the annual session of the association to include all scientific activities, the programming, and the scheduling of the annual session events. The council membership consists of the chairmen and secretaries of the seven scientific sections and the secretary-treasurer, a total of 15 members.

102nd Annual Session. Your council began plans for the 102nd Annual Session in August 1969. The general format, previously approved by the House of Delegates, has been continued with general sessions centering around broad areas of specialty interests. To the maximum possible extent, conflicts in programming have been eliminated. The council, in many instances, has requested and placed essayists before sections from the various specialty societies not represented in the Scientific Assembly. The membership is thereby given the benefit of the presence of these speakers which might not otherwise be available. The specialty societies continue to work closely in these and other connections to improve the quality and to enhance the attractiveness of our programs.

At the present annual session, about 12 specialty groups, four medical alumni groups, and various nonscientific but medically related bodies will meet concurrently during May 11-14. We believe that this arrangement offers variety and combinations of benefits for the membership in attendance.

We have scheduled film programs again immediately before each scientific section. We are gratified with the promising quality and interest of our scientific exhibits, and we urge each member and guest in attendance to avail themselves of the benefits of the Technical Exhibit which largely supports our annual session's scientific work.

Expression of the Council. Your Council on Scientific Assembly is deeply grateful for the support, cooperation, and assistance we have received in planning the 102nd Annual Session. We are especially aware of the problems confronting our headquarters hotel complex resulting from the devastating experience of Hurricane Camille. The Buena Vista organization has done splendidly in restoring services and facilities to fulfill our contract, and we will look forward to future annual sessions scheduled for our Gulf Coast.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

We approve the Report of the Council on Scientific Assembly and commend Dr. Simmons and his colleagues, the seven section chairmen and secretaries, who prepared for us such an excellent scientific program.

The report of the reference committee was adopted.

REPORT OF THE JUDICIAL COUNCIL

Constitutional Responsibilities. Your Judicial Council is one of eight elected councils of the association and one of the three which reports directly to the House of Delegates. Under authorities contained in Section 4, Chapter IX, of the By-Laws, the council is charged with the exercise of the judicial powers of the association and the interpretation and application of the *Principles of Medical Ethics of the American Medical Association*. The rulings of the council are subject to the will of the House of Delegates, and its judicial decisions may be appealed to the Judicial Council of the American Medical Association.

In the exercise of these powers and discharge of its responsibilities, the council endeavors to work with general officers, the Board of Trustees, and component medical societies. At all times, the council endeavors to be responsive to the needs and requests of members of the association.

Medical Ethics. At the 101st Annual Session in 1969, your council reported seven opinions to the House of Delegates relating to telephone directory listings, compulsory assessments upon hospital staff members, transplantation of human tissue, drugs and devices, treatment of obesity (condemnation of the so-called "rainbow pill" regimen), laboratory services, and use of bank credit cards for payment of physicians' fees. Your council reaffirms these opinions.

Two physicians who are members of the association asked the council during the 1969-70 as-

sociation year to examine into a circumstance in which it was charged that a third physician, also a member who practiced in the same medical community, occupied offices in a community (Hill-Burton) hospital. The council, acting through the chairman, requested the component medical society to investigate the charge to determine if sufficient basis existed for formal action.

A committee of the component society, including the district Trustee, conducted the investigation and found that the office in question was merely in close proximity to the hospital with a walkway. The society expressed the opinion that no violation of law, regulations, or medical ethics had occurred, and the council has considered the matter closed. The Board of Trustees also received a report in this connection through the Trustee, also at the request of the council.

The council, acting on prior policies of the association, issues the following opinion:

Physicians should not maintain offices for the conduct of their regular private practice for care of outpatients in community, county, nonprofit, or church-affiliated hospitals. Exceptions are made in the case of those physicians whose practice of medicine is usually conducted in the hospital environment such as pathologists and radiologists. The proscription does not apply to the private proprietary hospital or to physician-owners when the medical staff approves the practice.

Discipline. The council has conducted no formal proceedings as to disciplinary matters either by original jurisdiction or on appeal during the association year. We stand ready, however, to respond to any need where and when necessary.

AMA Judicial Council. All opinions and decisions of the AMA Judicial Council are regularly reviewed, and each member of your council maintains a compendium of these opinions and decisions which are secured and distributed through our association's executive office.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

Your reference committee considered the Report of the Judicial Council, noting especially the opinion of the council with reference to physicians having offices in hospitals. We concur in this opinion and recommend adoption of the report.

Dr. Tom H. Mitchell of Vicksburg moved to amend the Report of the Judicial Council by deleting the period at the end of the first sentence in the opinion, replacing it with a comma, and adding the words "but this shall not exclude the establishment of such offices as may be necessary for training under the American Board of Family

HOUSE OF DELEGATES / Continued

Practice or such other residencies as may be so structured." The motion to amend was seconded by Dr. S. S. Kety of Picayune. The Speaker put the motion to amend which was adopted, and the main motion of the reference committee to adopt the report was passed as amended.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

Organization and Duties. The Council on Medical Service is a constitutional body of the House of Delegates. It is charged with the responsibility of ascertaining and studying all aspects of medical care in Mississippi. Under the council's jurisdiction are assigned activities of the association in medical service, emergency service programs, medical care for the indigent, and the work of allied medical agencies. The council is assisted in its work by four constitutional and three *ad hoc* committees. Programs, studies, and activities of the several committees embraced a wide range of subject areas and policy development and implementation during the 1969-70 association year.

Committee on Maternal and Child Care. The committee continues to pursue its study of maternal deaths in Mississippi, and during the year, it marked a full decade of these studies. The data have been processed on the association System/360 computer, and selected papers from the studies have been published in the JOURNAL. At the 101st Annual Session, the committee presented a scientific exhibit on its work.

Of particular interest is a recent substudy of anesthesia-related deaths in the series, and this is being presented in the Scientific Assembly at your 102nd Annual Session. The committee works closely with the Department of Obstetrics and Gynecology of the University Medical Center.

The committee continues to make available sets of "Maternal Health Desk Cards" which are distributed to hospitals through chiefs-of-staff and chiefs of ob-gyn services. The committee conducts regular quarterly meetings to pursue its duties and review case studies. The chairman is Dr. William B. Wiener of Jackson, and the committee has seven members and three consultants in medicine, pathology, and anesthesiology.

Committee on Mental Health. Continuing its work in broad areas of mental health, the committee has been acutely aware of problems in drug addiction. During the year, it has conducted educational activities in this connection and made materials available to physicians who have addressed school, youth, and other nonmedical audiences on the subject.

The committee reports that seven of the nine multi-county regions in Mississippi now have mental health centers or are preparing to become operational in the near future. Centers are already open at Tupelo, the first in the state, and at Oxford. Units for Jackson and Greenville are under construction, and plans are in advanced stages for centers at Meridian, Clarksdale, and Gulfport. The program has grants totaling \$3.7 million.

The chairman is Dr. John J. Head of Whitfield, and the committee has seven members.

Committee on Occupational Health. The committee, charged with study of all aspects of occupational health, continues to pursue an interest of a suitable and adequate legal base for Workmen's Compensation in Mississippi. The 1968 amendments covered occupational disease. Additional measures were pending before the 1970 Regular Session at the time of preparation of this report.

The committee continues to have interest in publishing papers in this area of interest in the JOURNAL.

The chairman is Dr. George D. Purvis of Jackson, and the committee has seven members.

Committee on Blood and Blood Banking. This committee was accorded constitutional status by the House of Delegates at the 101st Annual Session in 1969. It has been active in conducting Congressional liaison in connection with National Blood Donors Week and in the issue of a commemorative postage stamp on blood donors in a cooperative effort to focus attention on this acute need.

The committee has further pursued studies on computer-based blood bank inventory information systems and intends to institute, at the earliest practicable time, a pilot project making use of the association's computer. Modest financing will be required, and the possibilities of securing this from participating medical institutions will be explored prior to requesting support funds. The committee has also considered the possibility of a grant application for a demonstration project. When and if such a decision is reached, the matter will be subject to the usual approval procedures traditionally followed.

The chairman is Dr. Kenneth M. Heard of Jackson, and the committee has seven members.

Committee on Nursing (ad hoc). The committee has been intensely devoted to the major issue of mandatory licensure for nurses in Mississippi during the year. At the 101st Annual Session, the House of Delegates received majority and minority reports from the reference committee considering this matter. Neither was approved

nor rejected, and the matter was recommitted to your council by the House of Delegates.

The association was then confronted with a difficult dilemma: The 1970 Regular Session of the Legislature, before which the issue of mandatory licensure for nurses was to be brought, was to convene the first week of January 1970, and with great interests in patient care at stake, we had urgent need for policy clarification. Useful debate at the 101st Annual Session, valid opinion, and response from delegates were carefully noted by the committee and council. Your council re-assigned this matter to the committee which conducted meetings both with nurse organization representatives and those of the hospital association. Extensive deliberation in executive session was carried out.

The committee reported to your council which, in turn, conducted a special meeting for consideration of the issue. Taking note of the fact that nurses have mandatory licensure in 42 of the 51 United States jurisdictions and the fact that nine of 13 health service and health-related professions in Mississippi have mandatory licensure, the committee viewed the problem in the context of discussions before our House of Delegates in 1969. Two points were primary:

—Whether mandatory licensure would serve as an incentive for improvement in quality education toward the end of better bedside nursing.

—Whether mandatory licensure would exacerbate the already-critical shortage of nurses.

The committee and your council were deeply concerned over any threat to (1) medical assistants to physicians who might not qualify for licensure and (2) those employed in hospitals who, while not carrying responsibilities of a nurse in the literal sense, might be brought under the law and be unable to qualify.

Accordingly, the following policy position was recommended and approved by the council:

(1) The association supports mandatory licensure of nurses in principle, reserving the prerogative of making further changes and improvement (in the proposal), including the offering of amendments to any bill introduced, and further reserving to the Board of Trustees the prerogative of final approval of any bill presented.

(2) The Committee on Nursing be utilized in consultation and testimony before the Legislature (within the framework of policy established) because of the committee's familiarity and expertise in the matter.

The Board of Trustees considered the work of the committee and the recommendations of your council in December 1969 and approved the policy. The committee chairman appeared as our

witness during hearings on the bill in the 1970 Regular Session. As this report is submitted, the proposal is still pending, and the association continues to pursue its goals within the policy framework established.

The chairman of the committee is Dr. Tom H. Mitchell of Vicksburg, and there are five members.

Health Insurance Benefits Advisory Committee (ad hoc). This committee continues to serve as the official medical advisory committee for operation of Medicare in Mississippi with official status before the Certifying Unit for inpatient facilities, an activity of the State Board of Health.

The committee conducts meetings with physicians experiencing problems under the program, the Part 1-B carrier, the Part 1-A intermediary, intermediaries representing extended care facilities, the Bureau of Health Insurance of the Social Security Administration, representatives of HEW, and providers of services. The committee is not encouraged over these conferences as to results of its work and recommendations, despite its sincere efforts and diligence.

An advisory panel of knowledgeable physicians was appointed to work in utilization review as regards hospitals and ECF's, primarily with reference to the Certifying Unit, our third *ad hoc* body.

The chairman of the committee is Dr. Mal S. Riddell, Jr., of Winona, and there are seven members.

Other Council Activities. Some small but encouraging progress is being made in placing practicing physicians as voting members of hospital governing boards, despite opposition to this by many hospitals. This useful and important means of liaison with the medical staff bears the endorsement of the Joint Commission on Accreditation of Hospitals, the American Medical Association, the American College of Surgeons and most major national specialty societies, our own state medical association and most of our sister state medical associations.

We continue educational efforts and programs designed to upgrade emergency medical service. During the year, the helicopter demonstration project has shown great promise, as reported in the JOURNAL. Staffing of hospital emergency rooms with physicians has greatly extended these services, and we endorse the various approved postgraduate and continuing education programs for physicians, nurses, and other allied professional personnel in this area as being vital to improvement of emergency medical services. There is a salutary trend in legislative develop-

HOUSE OF DELEGATES / Continued

ment on standards for ambulance and driver standards.

We met prior to the implementation of Title XIX Medicaid with state officials of the Medicaid Commission, and we have carefully monitored program development. Oversight of program development remained a primary responsibility of the Board of Trustees during the year, because of the Extraordinary Session of the Legislature to shape the program. Your council, however, is prepared to assume oversight of the ongoing program when and if the Board and House of Delegates so direct, as was the case in Medicare.

The council expresses appreciation to its several committees, some of which are among the most active bodies of the association, and to our colleagues of the Board of Trustees who have worked closely with us, giving understanding support and guidance to our problems and programs. The council emphasizes to the House of Delegates that its area of responsibility and concern, the actual practice of medicine and delivery of care, must have support from all members and adequate staff in our Executive Office. We repledge our best efforts in carrying out our work.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

We commend the council for its work in our behalf and for its varied and versatile program which includes the work of four constitutional committees—Mental Health, Maternal and Child Care, Occupational Health, and Blood and Blood Banking.

We approve the Report of the Council on Medical Service and recommend its adoption.

The report of the reference committee was adopted.

REPORT OF THE BOARD OF TRUSTEES

Organization and Duties. The Board of Trustees is the executive and governing body of the association during vacation of the House of Delegates. It is additionally charged with the duties and responsibilities prescribed by law for directors of corporations. In the discharge of these duties, the Board shall have conducted six meetings since the 101st Annual Session. The Board met in May, September (having been forced to cancel a scheduled August meeting because of Hurricane Camille), December, and February. Meetings are scheduled for April and May. Altogether, these meetings included 10 meeting days, usually exclusive of travel time.

Seven officers sit with the Board of Trustees in all meetings. They are the president, presi-

dent-elect, secretary-treasurer, speaker, vice speaker, and AMA delegates. The Board is assisted in its work by support of the executive staff. All 1969-70 meetings were conducted at our headquarters building at Jackson.

This annual report includes actions on matters referred to the Board by the House of Delegates and those items relating to management and policy functions which are among the Board's responsibilities.

Referrals from the House of Delegates. Matters referred to the Board of Trustees by the House of Delegates at the 101st Annual Session and actions by the House requiring Board action include:

(a) *Blue Cross Group.* The new hospital service contract available to the membership has been operational for a year. It provides for 100 days per confinement with a room allowance of \$20 per day and all ancillary services. The House of Delegates voted to have the Board ask the plan to pay benefits due 15 subscribers in an amount of about \$16,000 carved out under Medicare prior to concluding a nonduplication agreement and to refer the matter of the nonduplication agreement back to the Board for further study.

The Board acted on the mandate of the House on the payback, and the plan reports that this has been accomplished. The matter of the nonduplication agreement has become moot, since the new 122X contract contains a standard provision on this.

(b) *Resolution No. 2.* This resolution asks that the association "seek amendments to existing law to provide for more proper and adequate professional compensation" for autopsy. In approving the resolution, the House asked "that the Board of Trustees of the association work out a suitable fee schedule with the executive committee of the Mississippi Association of Pathologists." At the time of preparation of this report, two bills to accomplish this are pending before the 1970 Regular Session of the Legislature.

One measure would increase the fee from \$75 to \$250. While we sponsor and support the bill, we have asked that the amendment provide for payment of the usual and customary fee rather than for a fixed amount. Prior to the convening of the Legislature, conference was conducted with the secretary of the Mississippi Association of Pathologists, and a formal letter in this connection was written inviting recommendations and suggestions.

(c) *Resolution No. 3.* This resolution expresses the belief of the association that "to replace physician-to-physician consultation with

physician-to-industrial firm consultation (in the matter of laboratory services) would be unwise and not in keeping with good medical practices."

The resolution also asked that we communicate our concern over advertisements (for commercial or industrial laboratories) which appear in *Journal AMA* to the AMA House of Delegates. Drs. Nelson and Hicks introduced an appropriate resolution at the 118th Annual Convention of AMA at New York. There were 10 similar resolutions also introduced.

The AMA House, however, adopted a substitute resolution and a report of the Judicial Council which, although reaffirming its historic position on the practice of pathology being the practice of medicine in every sense, took notice of the court decree in the matter of *United States of America v. American College of Pathologists*. Under this position, nonmedical laboratory advertising is not barred from *Journal AMA*.

The Board of Trustees invites the attention of the House of Delegates to the fact that nonmedical laboratory advertising is *not* accepted in our JOURNAL in the light of action at our 1969 annual session.

(d) *Resolution No. 4*. This resolution asks that the Mississippi Medical Political Action Committee prepare educational material concerning the coronership and supply physician-candidates suitable material, coordination, and expertise and that MPAC study the counties of the state, encouraging physicians to seek this office.

The Board conferred with the chairman of MPAC and found that funds of the organization are extremely restricted. Moreover, these are the only funds which may lawfully be used in candidate support. The PAC is not a formal organization in the sense of being able to sustain service programs and studies. The Board, therefore, offered the best resources available in accomplishing this purpose, the pages of our JOURNAL, and asked the sponsor of the resolution to submit materials for publication in furtherance of the objectives which he sought in the resolution.

(e) *Resolution No. 6*. For the first time, in 1969 the House of Delegates approved the concept of professional corporations for physicians. This resolution called for our sponsoring an amendment to Mississippi law in this connection. An association-sponsored bill was introduced early in the Regular Session, and we testified three times in its support before the House Committee on the Judiciary. The measure passed the House of Representatives without a dissenting vote and is pending before the Senate Judiciary Committee "A" at the time of preparation of this report.

Nominations to State Board of Health. Following up on House actions in 1969, nominations were made to the Governor for appointment of three members of the Mississippi State Board of Health. These are:

For Public Health District 2: Drs. G. Lacey Biles, Sumner; Julian C. Bramlett, Oxford; and John R. Lovelace, Batesville.

For Public Health District 4: Drs. S. Lamar Bailey, Kosciusko; Thomas N. Braddock, West Point; and Lester D. Webb, Calhoun City.

For Public Health District 5: Drs. Lamar Arrington, Meridian; John R. Laird, Union; and Omar Simmons, Newton.

CHAMPUS. The association is in its 14th year as fiscal administrator for the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), the original military Medicare. With amendments to the law providing outpatient benefits and inclusion of retirees, the program has grown fourfold into a multimillion dollar operation. It remains unique in these respects:

—It is the only medical care program in Mississippi operated exclusively under physician control.

—It is the only medical care plan with a virtually unrestricted prescription drug program.

—It is unique in possessing a true usual and customary fee reimbursement system under medical peer control.

A five-member review committee meets 12 to 15 times annually on claims in question, and we are paying about 94 out of every 100 claims exactly as received. Our reorganized Department of Medical Care Plans in our offices makes payment weekly to physicians and others providing services.

JOURNAL MSMA. Our JOURNAL completed its first decade of service to the association with publication of the 120th consecutive monthly issue in December 1969. This largest single association-sponsored project is a team effort among the Editors, Committee on Publications, our printers, and executive staff. The Board expresses appreciation to the Editors and committee for their faithful and diligent services and pledges continued support to this vital membership service.

Legal Matter. At the 101st Annual Session, it was reported that the association and the Executive Secretary had been named defendants in the matter styled *J. P. Culpepper, Jr., v. American Medical Association*. Also named as defendants were the South Mississippi Medical Society and two officers. AMA dues in transit through the Mississippi State Medical Association in the

HOUSE OF DELEGATES / Continued

amount of about \$31,000 were attached by the plaintiff.

On June 9, the Executive Secretary answered subpoenas for the association and himself in the company of our legal counsel in Chancery Court for Forrest County, when a continuance was ordered.

On July 8, the Chancellor, having accepted a compromise which was also accepted by the plaintiff, dismissed the suit with full prejudice as Cause No. 26509 on motion by plaintiff. AMA dues funds in the hands of the "garnishee defendant," as the association was identified, were thereby released. Because of the nature of the court order, the matter is closed.

Insurance Programs. In addition to the Blue Cross hospital group, the association also sponsors general accident, disability, health, and life programs with the Continental Casualty Co. through Thomas Yates and Co. of Jackson, administrators, and a professional liability program through the St. Paul Companies.

(a) *Continental Programs.* The group life program, one of the most recently initiated, has been successful to the point that benefits have been increased by 20 per cent without change in premium. Where a member carries the previous maximum of \$40,000, he now has \$48,000 for the same premium. We have recently inaugurated a group ordinary life program which requires no medical examination.

Participation continues to be excellent in the disability income programs, catastrophic hospital expense program, and office overhead expense group. Approximately 40 per cent of the membership carry some 1,200 contracts in these programs. The administrator makes a full disclosure reporting to the Board of Trustees on all aspects of these programs. The association does not handle any premiums or benefit payments, nor does it realize any income from any insurance program. We take the position that any profits which might thereby accrue should be passed along to participating members in the form of lower premiums, increased benefits, or both.

(b) *St. Paul Program.* The association is in its 9th year with the St. Paul professional liability program in which about 600 members participate. We have enjoyed the lowest professional liability premium rate in the United States as a result of our carefully managed program and claims review counseling by the Board.

The professional liability crisis has become acute in many states with astronomical premiums

ranging up to as much as \$20,000 per year for certain specialties. The Board urges that care and diligence in the securing of this coverage be exercised and that threatened or instituted litigation be brought before the Board by any member concerned. The frequency of suits has increased as have awards and settlements in Mississippi.

Appointments. Under the provisions of Section 1, Chapter VII, of the By-Laws, the appointive powers are vested in the President. During the 1969-70 association year, President Royals has made the following appointments, each of which has the endorsement of the Board of Trustees:

(a) *Alternate Delegate to AMA.* Following the death of Dr. B. B. O'Mara of Biloxi, his unexpired term as Alternate Delegate to AMA was filled by Dr. Joseph B. Rogers of Oxford, AMA Alternate Delegate-elect.

(b) *RMP Representative.* President Royals, upon assuming office, resigned as the association's member of the Regional Medical Program Advisory Council. He appointed as his successor Dr. C. D. Taylor, Jr., of Pass Christian, our immediate past chairman of the Board of Trustees.

(c) *Committee on Publications.* This committee consists of the three Editors and three who are appointed for terms of three years each by the Board of Trustees. To serve the unexpired term of the late Dr. B. B. O'Mara, President Royals appointed Dr. Frank L. Butler, Jr., of McComb.

(d) *Delta-HEW Project.* This program for a five-county area, since identified as the County Health Improvement Program (CHIP), is operated by a Committee of Nine consisting of representatives of the state medical association, the State Board of Health, the University Medical Center, the Mississippi Medical and Surgical Association, and consumer representatives. Dr. Temple Ainsworth of Jackson, who represented the association on the committee for two years, resigned, and President Royals appointed Dr. Lyne S. Gamble of Greenville as successor.

(e) *Hospital Manpower Study.* The Mississippi Hospital Association received an RMP grant with which to fund a manpower study. Dr. Warren N. Bell of Jackson was named to represent the association as a member of the advisory body to the project.

(f) *Section on Preventive Medicine.* When Dr. Frank K. Tatum of Tupelo retired from the practice of preventive medicine, he also resigned as secretary of the Section on Preventive Medicine of the Scientific Assembly. President Royals, after consultation with the section chairman, ap-

pointed Dr. Frank M. Wiygul, Jr., to serve the unexpired term as secretary of the section.

(g) *Medicaid Committee.* Upon invitation by the Mississippi Medicaid Commission, President Royals appointed a five-member Technical Advisory Committee on Physicians Services. Members are Drs. Joe S. Covington of Meridian (internal medicine), James D. Hardy of Jackson (general and thoracic surgery), William J. Carr, Jr., of Gulfport (pediatrics), J. Leighton Pettis of Tupelo (ophthalmology), and Tom H. Mitchell of Vicksburg (general practice). The committee elected Dr. Covington chairman, and he serves as the association's representative on the commission's Advisory Council.

Organization of the Board. One new Trustee, Dr. James T. Thompson of Moss Point, District 9, was welcomed to the Board during 1969-70, bringing to a total six new Trustees named to the Board since 1967. Dr. Thompson succeeded Dr. C. D. Taylor, Jr., of Pass Christian who retired after 13 years service, the last of which he served as chairman.

Officers of the Board during 1969-70 are Drs. Mal S. Riddell, Jr., of Winona, chairman; J. T. Davis of Corinth, vice chairman; and William O. Barnett of Jackson, secretary.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

In its annual report to the House of Delegates, the Board of Trustees has furnished information on matters relating to routine management of the association's affairs and matters referred to it by the House of Delegates at the 1969 Annual Session. A reading of the report demonstrates the massive tasks which were carried out by the Board of Trustees. We approve the report and express our appreciation to the Board and general officers for their continued exercise of leadership.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "A" OF THE BOARD OF TRUSTEES

Scheduling of Annual Sessions. The Constitution of the association provides for the annual session, and under the By-Laws, it must be conducted prior to the annual convention of AMA. Section 2, Article V, of the Constitution states that "the time and place for holding the annual session shall be fixed by the House of Delegates, but in emergencies, the Board of Trustees shall have the power to fix or change either the time or the place or both. . . ."

Since 1966, three major policy changes on scheduling the annual session have been made

by the House of Delegates. Until 1966, the annual session was scheduled on a year-to-year basis, and by custom and tradition, it was rotated between Jackson and Biloxi. Actually, these have long been the only two cities in the state with adequate facilities. Because of scheduling difficulties on the year-to-year basis, the House approved a four-year advance schedule, and the association contracted on an alternating basis for Jackson and Biloxi 1967-1970.

Site of Annual Session. As convention facilities in Jackson became less satisfactory and as the annual session grew in size and scope, it was noted that attendance on the Coast was increasing. At the same time, Coast hotel facilities were improving as major hotels in Jackson were closed.

At the 99th Annual Session in 1967, the House agreed that the 1968 meeting would be conducted at Jackson to fulfill then-existing contracts but that annual session thereafter would be conducted on the Gulf Coast "until such time as more adequate and suitable convention facilities are made available at Jackson." There is no immediate prospect of improvement at Jackson, because the 300-room supermotel now under construction is incapable of accommodating the meeting.

Resolution No. 9. By tradition, the annual session has been convened during the second full week in May, thereby conflicting with Mother's Day and with municipal elections during years held. Resolution No. 9 resolves "that the Board of Trustees is empowered to alter the date of the annual session so as to avoid these conflicts and to make such changes as are necessary and possible in contracts with the headquarters hotel to accomplish this purpose."

In implementing the resolution, the Board was unable to alter the 1970 contract because of existing commitments by the hotel. We have, however, been able to make necessary changes for 1971 through 1973:

<i>Annual Session</i>	<i>Dates</i>
102nd	May 11-14, 1970
103rd	May 3- 6, 1971
104th	May 8-11, 1972
105th	Apr. 30-May 3, 1973

To maintain our four-year advance schedule, the Board of Trustees recommends that the 106th Annual Session be conducted May 6-9, 1974, at Biloxi.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

In response to Resolution No. 9 adopted at the

HOUSE OF DELEGATES / Continued

1969 Annual Session, the Board of Trustees have authorized renegotiation of our contracts with the Buena Vista for the 103rd, 104th, and 105th Annual Sessions in 1971, 1972, and 1973, respectively, so as to avoid conflict with Mother's Day and with municipal elections.

The Board also proposes that the dates of the 106th Annual Session be fixed for May 6-9, 1974, and asks for authority to conclude the necessary contracts.

We approve the rescheduling of the Annual Sessions in response to Resolution No. 9 and the proposed meeting dates for 1974.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "B" OF THE BOARD OF TRUSTEES

Himler Report. In November 1965, the AMA House of Delegates authorized and approved a planning and development project through the Board of Trustees who appointed an *ad hoc* committee for this purpose. The committee reported that AMA planning:

- Could be made more effective.
- That it should not be separated from management.
- That its process should be tailored to fit AMA's unique situation.
- Should be a commitment of leadership.
- Efforts should be to enlighten problems for solution.

Recognition should be given to the fact that the AMA structure presents severe limitations.

A Committee on Planning and Development was appointed in 1968, chaired by Dr. George Himler of New York. The report, a lengthy document, was presented to the House of Delegates at Denver in 1969, and a minority report from Dr. John H. Budd of Ohio, a member of the committee, accompanied the majority report.

The Himler Report is a searching and thoughtful examination of medical care in the United States, its manner of delivery, financing, governmental influence, medical facilities, manpower problems, allied professions, and the physician himself. It further touches on medical organization, health care consumers, and a host of related areas.

The report contains 18 groups of recommendations totaling 57 in number. The minority report contains 19 recommendations, each a modification or refutation of a corresponding recommendation in the majority report. As such, the mi-

nority report cannot stand alone as a substitute for the majority report.

As should be expected of any major study of this scope, challenge, depth, and candor dealing with critical and painfully difficult problems, the Himler Report has evoked controversy. As often as not, opposition has been based on single statements or groups of statements judged alone. Some appear to object to the entire document as to content, but many of the recommendations flow from existing AMA policy.

No attempt was made by the AMA House of Delegates to act with finality on the report at Denver, and indeed, they could not. The House voted to name a committee to receive the report, to study its content, and to refer it to the governing bodies of constituent state medical associations.

In the latter connection, the AMA House stated that it can better act on the recommendations "with the benefit of individual resolutions to be submitted by the component and constituent state associations or societies." Your Board of Trustees has reviewed the Himler Report and the minority report together with an analysis by our AMA Delegates, Drs. Nelson and Hicks. They request instructions on the wishes of the association, recognizing the magnitude of their tasks at the Chicago annual convention of AMA in June.

The Board of Trustees recognizes the importance of this report and the difficulties implicit in dealing with its recommendations. The Board voted unanimously to transmit the report to our House of Delegates and to publish it to the membership prior to our 102nd Annual Session, together with the minority report. The full text is appended to this supplemental report, and the Board hopes sincerely that every member of the association will study it carefully and make his wishes known.

President Royals has agreed to write every member of the association and to invite attention to this transmittal, asking for informed opinion and debate.

The Board of Trustees encourages component medical societies to generate resolutions and policy positions on the majority and minority reports herewith transmitted. We ask that individual members of the association appear at the reference committee hearing on this report and discuss their views. We ask these things toward the end of enabling our AMA Delegates to represent faithfully, accurately, and forcefully the thinking of the association on this vital matter.

In making this transmittal, the Board also records the fact that it has conducted careful and extensive deliberations over the majority and mi-

nority reports. Many points made have been concurred in, and many have not. Our present objective is to seek the widest possible participation in our decisions by the membership in an effective effort to advance the best thinking of our association as a contribution to the delivery of medical service in the United States.

REPORT OF THE AMA COMMITTEE ON PLANNING AND DEVELOPMENT

The Report of the AMA Committee on Planning and Development (Himler Report) and the minority report (Budd Report) were published in full text both in Volume XI, Number 4, JOURNAL OF THE MISSISSIPPI STATE MEDICAL ASSOCIATION, April 1970, and in the *Handbook of the House of Delegates*, pages 18-55.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

The committee agrees that the Himler Report cannot be approved or rejected in its entirety. The committee notes that many parts of the report involve established policies of the AMA, and we recommend approval of these parts. Many other parts involve study and gathering of information, and we recommend approval of these parts. The time available does not permit consideration and recommendation relating to each of its separate parts.

Your reference committee recommends that a separate study committee be appointed to study the report in detail and to disseminate information to the members of the Association through meetings of the component societies and the various hospital staffs. This committee would, in effect, be a task force with the responsibility of providing as much knowledge of the report as possible to each member of the association in order that decisions of the association may be truly representative of the consensus of the entire membership.

Your Reference Committee associates itself in the recommendations of our President and Board of Trustees in requesting every member of the association to study this report carefully and inform himself of its contents because of the potential impact it could exert on the practice of medicine and the delivery of health care in the United States.

Your Reference Committee further recommends that the task force report to the House of Delegates at the 103rd Annual Session in 1971 with the object of arriving at a final policy disposition on the Himler Report.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "C" OF THE BOARD OF TRUSTEES

Authorization of Building Project. The proposal for a needed addition to the Central Office Headquarters building, as developed and recommended by the Board of Trustees, was approved by the House of Delegates in 1967 and reaffirmed in 1968. Final planning and development of the project, including financing arrangements, also approved by the House of Delegates, were completed in late 1968 and early 1969, and the Board invited bids on April 17, 1969. This was reported to the House of Delegates at the 101st Annual Session and was approved.

The architect for the project is William R. Bob Henry, A.I.A., of Jackson. The Board of Trustees named the Executive Committee as the Building Committee to supervise and oversee all details in construction and finance.

Under authorities granted by the Board, the president signed the construction contracts and usual agreements.

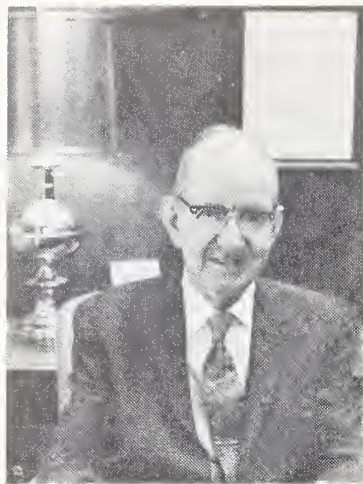
Award of Contract. The Executive Committee received sealed bids on May 20, 1969, and the award was made to the lowest and best bidder, the Priester Construction Co. of Jackson. The architect's estimate was within 1 per cent of the successful bid. Basic bids ranged from a high of \$114,900 to the successful bid of \$100,700. Contingent amounts totaled less than \$5,000, also as estimated accurately by the architect. Ground was broken in early June, and the project was completed in February 1970.

Construction and Reporting. The addition is framed with structural steel with reenforced concrete substructure and flooring. The exterior masonry matches the original building, and the quality of the addition equals or exceeds that which was constructed in 1955-56.

The Building Committee monitored the project closely and reported to the Board of Trustees at each meeting during the course of construction. Monthly reports were made to the membership through illustrated news articles in the JOURNAL. The original building was repainted, and carpets which were 14 years old were replaced.

Financing. As previously approved by the House of Delegates, the addition was financed with a bank loan below the prime interest rate and certain conservations made for the addition. The entire project, to include construction, professional services, site improvement with a vastly expanded parking area, equipping and decorating totaled \$129,523.95 of which \$89,000 was financed with the bank loan and \$40,523.95 from

(Turn to page 458)



The President Speaking 'Our Medical Democracy'

PAUL B. BRUMBY, M.D.
Lexington, Mississippi

TO ATTEND A convention of the American Medical Association is the treat of a professional lifetime, and to be present as a state association officer, able to observe at close range the decision-making process in the House of Delegates confirms the fact that medical organization is democratic and fair.

At Chicago in June, I was impressed that an overriding desire to do what was best for the health and welfare of the nation was implicit in all the varied and spirited debate before the reference committees. It was also clearly apparent that the survival of the private physician in this environment was a matter of equal concern.

Many problems were resolved at the annual convention, but many were sent back to the Board of Trustees and the various councils for further definitive study and work. A program for national professional liability coverage has been developed, and it may prove to be of great value in the future.

National health insurance under many differing schemes was thoroughly discussed and while our own Mediredit approach was looked on with favor, other approaches had much political backing. The most innovative approach to health care was a formation of closed panel corporations consisting of medical society-sponsored foundation corporations at the state level with lesser corporations consisting of any or all members of the local society. These groups would furnish complete medical care on a contractual basis. The actual mechanism of care and payment for services would be a problem of local component organizations. This approach is being used on the Monterey peninsula and fulfills the closed panel concept favored by HEW. There was a definite feeling that present Medicaid and Medicare programs would be consolidated into one grand centralized program.

A more standard method of reporting infant and maternal deaths was demanded, both on a national and an international scale. Our present method of comparing American apples with foreign oranges is giving our detractors that famous cry that we are the 15th among nations in infant mortality.

The final decision about abortion was the masterpiece of the meeting. Certainly we can all go along with the decision that abortion is a medical decision and procedure and should be performed only in an accredited hospital in conformance with the standards of good medical practice after consultation with two other physicians chosen for their medical competence. No doctor would perform an abortion if it violates his own moral principles.

The worry about the Himmler report was abated. This report was broken down into approximately 20 individual issues and sent to the various reference committees which were concerned with its context. From these committees, it was sent back to the Board of Trustees for further consideration. Not once was that phrase with which we are so familiar—"Without regard to race, creed, or ethnic origin"—appended to any resolution adopted. Democracy in American medicine does work. ★★★



Decision on Abortion: The Next 90 Days

I

THE EYE OF THE ABORTION storm may have passed, but the backside of this medical, social, and moral hurricane is whipping up a furor which is not likely to subside quietly. Take note of the fast-breaking succession of events in the past 60 days:

—The AMA House of Delegates turned thumbs down on a proposed physician-patient-only abortion decision policy, adopting instead a watered-down position which can be called only a little more liberal than the 1967 action.

—The 6,000-member National Federation of Catholic Doctors Guilds, bitterly opposed to the moderated AMA stand, threatened mass resignation from organized medicine.

—New York's "on demand" abortion law with no residence requirement became effective, and Empire State hospitals were swamped with patient-applicants.

—Blue Cross ruled that every member plan must provide abortion coverage to national account subscribers—single women included—not just as a possible optional benefit but as a hard condition of the local plan's keeping its name, symbol, and membership in the Blue Cross Association.

—Every state medical association meeting in annual session during the two months period liberalized its views on abortion to some extent with Oregon and South Carolina joining the "on demand" side of the explosive issue.

Top all this off with the frosting on the cake when the United States Supreme Court rules on the constitutionality of state abortion statutes this fall. It now appears that the euphemism of the century is the view that 1970 is a year of transition on professional and public attitudes on abortion.

II

At the Chicago annual convention, the issue of abortion was hardly a sleeper, but the delegates came to debate with four pounds of Himmler Report and to get themselves picketed by the hippies and yuppies. Instead, an acrimonious debate materialized when a proposal hit the floor to leave decisions on abortion strictly between the patient and her physician. From the first, it was apparent that the delegates were determined to stop short of putting American medicine in the "on demand" column.

The compromise action simply permits the procedure for socio-economic reasons where state

EDITORIALS / Continued

law sanctions it but the operation may be performed only in an *accredited* hospital after consultation with two consenting physicians. The reference committee said that this position permits the procedure by a physician "for any reason that he determines is in the best medical interest of the patient."

Spokesmen for the Catholic physicians said that the policy made M.D.'s "paid executioners." The federation president, Dr. Gino Patola, resigned his AMA membership on the spot and called for like action by his 6,000 colleagues. It is estimated that as many as 35,000 AMA members are Roman Catholic.

Some AMA leaders are disenchanted with the decision. Dr. Wesley W. Hall of Reno, Nev., winner of the four-way race for president-elect, said that he "couldn't live with the policy" on a permanent basis. He looks for further moderation by the Board of Trustees and House of Delegates.

III

“The patients came out of the woodwork on July 1,” winced a New York medical society executive, commenting on the state’s new law which has no residence requirement. Within 48 hours, many hospitals had waiting lists numbering in the hundreds, and some administrators were frankly concerned about overutilization of inpatient facilities to the detriment of usual care delivery.

But two safety valves on the law may prevent a runaway situation in New York: Guidelines issued by public health authorities are introducing aspects of restraint, and the procedure may be performed on an outpatient basis when certain strict medical minimum conditions are met.

The Medical Society of the State of New York has issued guides to its 27,000 members, and these parallel closely those of the public health department. But the state medical society guides assume critical importance in that they may become the practice standard for judging malpractice cases. The state statute permits abortion up to the 24th week of gestation, but both the state society and public health department advise the procedure by or before the 12th week. Some hospitals, also empowered to adopt guides with medical staff approval, are limiting abortion to the 12th week.

Initially, outpatient abortions could be performed in a clinic "near a hospital" with additional requirements of a standby anesthesiologist and blood bank facilities. The Department of

Health has receded from this strict posture to permit the Planned Parenthood clinics to offer the procedure when qualified physicians are in attendance.

The operation may be offered to any woman 17 years of age or older, married or single, with or without parental consent, and in selected cases to younger patients. Most hospitals are limiting admissions to *bona fide* residents of the state and many are taking only residents of the city or county in which the institution is located. New York Blue Cross had provided prepayment benefits for the service.

Charges for the procedure vary widely. The Associated Press reported hospital charges ranging from \$105 for one day in New York City to 18 municipal hospitals to as much as \$350. Physicians' fees were reported to range from the high side of that for D and C to the \$250 range. The state society's guides hold that after 20 weeks the procedure cannot be classified as an abortion but rather as the actual birth process. The accompanying warning to complete registration and charts underscore medicine's concern for medicolegal sequelae.

IV

At Biloxi last May, the state medical association's House of Delegates approved abortion fo-



"No, no, doctor—it's not **that** Mrs. Brown."

Is the Muse Usually Boozed?

therapeutic indications, fetal considerations, and when the pregnancy results from rape or incest. The law presently provides for termination of pregnancy when the life of the mother is threatened or when the pregnancy results from rape.

Despite the furor which the issue has raised nationally, only a minority of states have changed abortion laws. Since 1967, a fourth of the states—13 to be exact—had modified statutes. Ten states have enacted amendments which coincide with the Mississippi policy position. Three states, Alaska, Hawaii, and New York, have “on demand” laws, but the extracontinental jurisdictions have stern residence requirements.

Two state supreme courts have reviewed abortion statutes, California and Massachusetts (“Abortion and the Law: Anachronisms Racing Science,” J.M.S.M.A. XI:335 (June) 1970). The California tribunal swept aside its ancient law, but the staid New England court upheld the prohibitive statute. A federal district court ruled the District of Columbia law unconstitutional in *U. S. v. Vuitch*, and the United States Supreme Court has accepted the appeal. This is the pivotal and probably decisive case in which a ruling is expected this fall.

The indicators seem to show high pressure from society for a modification of outdated abortion laws. The AMA action cannot be construed literally as opposed to the popular trend, because half of the delegates are from states where neither policy nor law has been changed. If anything, the AMA moved cautiously with a wait-and-see attitude. The rancor of the debate really represented another aspect of the controversy, not necessarily the central medical issue.

The Mississippi State Medical Association is preparing to go to the 1971 Regular Session of the Legislature and seek amendments to the abortion law in accordance with the action of the House of Delegates. These will include therapeutic abortion where the health of the mother is threatened, where there is a probability that the infant would be born deformed, or when the pregnancy results from incest. The provision now in the law permitting the procedure when pregnancy results from rape should be clarified to include forcible and statutory rape.

Key developments to watch, in the meanwhile, are the stability of the AMA policy, the New York experience, further direction of the Blue plans and the health insurance industry, and the U. S. Supreme Court where just five men can make the entire issue rhetorical in the next 90 days.—R.B.K.

This observation may cost the JOURNAL some good papers, since it attaches an unpleasant stigma to the craft of writing. Dr. Donald W. Goodwin of St. Louis, professor of psychiatry at Washington University School of Medicine, believes that writers, as a group, have a tendency to be alcoholics.

“Whether as Hemingway said, most good writers are alcoholics is uncertain, but apparently a large number are,” he says.

“Of the seven Americans who were awarded the Nobel prize for literature, four, according to their biographers, were alcoholics, and the fifth drank heavily.”

Dr. Goodwin reports that of the well-known American writers of the past century “quite possibly one-third to one-half could be considered alcoholic.” He lists five principal reasons for his premise:

—Writing is a form of exhibitionism, and alcohol lowers inhibitions and can bring out exhibitionism.

—Writing requires an interest in people, and alcohol increases sociability and makes people interesting.

—Writing requires self-confidence, and alcohol bolsters it.

—Writing is lonely work, and alcohol assuages loneliness.

—Writing requires intense concentration, and alcohol relaxes.

Dr. Goodwin goes on to contend that careful writing consists of an endless chain of small decisions, choosing the best work, excluding this, including that, and the good writer, while working, is an obsessional. He argues that restricting obsessions to the 8-to-5 workday is difficult, as the wheels of the mind keep turning. He reports that writers are notorious sufferers of insomnia, so they turn to the cup that cheers for emancipation from the tyranny of mind and memory.

In defense of the origin of the printed word, let it be noted that virtually every art form fulfills Dr. Goodwin’s criteria for the writer boozing it up. So do many forms of work in this world of technology. Let us take whatever comfort there may be in the view of medicine that alcoholism is a disease, albeit within the realm of possibility that honest, hard work could exacerbate it.

Please have no fears in submitting manuscripts to the JOURNAL: The Editors have yet to give one the sniff test.—R.B.K.

The Durability of the Hill-Burton Act

President Nixon suffered his first drubbing on a veto after a year and a half in office when the Congress overrode his disapproval of the 1970 amendments to the Hill-Burton Act. A strange alliance of Southern conservatives joined forces with Northern liberals to carry the day against the President.

The \$1.26 billion program carried certain strings which the White House couldn't swallow. It continues the formula of grants for hospital construction first begun in 1948 as well as \$1.5 billion in federal loan guarantees with the government obligated to pay up to 3 per cent of interest charged.

The President had asked Congress to discontinue the grants and to substitute instead a system of loans for hospital construction and modernization. The Senate ignored the plea, passing a generous measure which was trimmed in conference with the House of Representatives. Moreover, the provisions require the administration to spend the entire appropriation within the fiscal year.

The latter provision added insult to injury in incurring the Presidential wrath. The White House said that a program is pointless if the executive department has no discretion to exercise over it. Capitol Hill observers say that the spend-all clause was put into the bill after the administration dragged its feet on spending other health appropriations.

Southerners voted to override the President, because the 1970 amendments provide extra help for low-income states. The Northerners want federal money under whatever condition it is available. The combination was unbeatable for the party stalwarts who lost badly in their effort to sustain the veto.

A veto and subsequent override on an appropriations measure involving only slightly more than one-half of 1 per cent of the budget is normally not big news. But a clear pattern emerges in the attitude of the states toward preserving an institution which has been accepted with near-universal acclaim, the Hill-Burton formula for hospital construction financing. It will probably remain on the health care scene for decades to come.—R.B.K.

Muscle Busters Are Not Dum-dums!

Physical fitness has been receiving the emphasis long its due with just about everybody getting into the act. We have the President's Council on Physical Fitness which has been able to attract such stellar personalities as Stan Musial as chairman. But the skilled individuals who devote their careers to physical fitness, those with degrees in physical education, are generally regarded as occupying a low rung on the academic ladder.

Theodore W. Landphair, writing in *The National Observer*, notes that "in most places, physical education ranks with typing and remedial English in esteem and professorial pecking order." He says that when a football player is introduced as an engineering major, the reaction is that "he's bright for an athlete," but when the same player is identified as a PE major, he's just another dum-dum.

Landphair writes that at State University College at Brockport, N. Y., there is a new look for physical education. The department threatens the philosophers and scientific eggheads as it seeks a new image for the physical education major and professor.

Brockport will henceforth refer to its PE department as that of "sport science," relating more to cultural phenomenon than to sweaty athletes



"I have good news for you—but first, would you mind drinking this?"

straining against the weights. In fact, the school's new working definition of sport is "the act of vying physio-cognitive behavior against an obstacle in a competitively structured, institutionalized situation."

Brockport officials say that the new look for physical education is long overdue, because the nation, during the autumn months, bets \$135 million a week on football, and respected newspapers devote five or six pages daily to sports.

Whatever the case at Brockport, we use the amusing story to underscore the merit in physical fitness and to record esteem for those who teach and coach. Called by any name, the work of building sound bodies is a worthy and meritorious calling.—R.B.K.

The Bittersweet Issue of Cyclamates

The Food and Drug Administration's decision on cyclamates is getting another roasting from Congress, this time for permitting further use of the substances in dietary foods. Rep. L. H. Fountain (D., N. C.), chairman of the House Government Operations Subcommittee, has blasted HEW Secretary Elliott Richardson's department for inconsistency and possible illegal action.

Rep. Fountain charges that cyclamates, ordered off the mass market because evidence showed they produced bladder cancer in laboratory animals, are now being treated as a drug by FDA in issuing permission to use them in dietary foods. Yet, Fountain said, there has been no testing and investigation required for a new drug.

He said that the food sales would be uncontrolled and could result in widespread use of a dangerous substance. His argument centers around the order issued by former HEW Secretary Robert Finch under the Delany Amendment which prohibits any supplement which can be shown to produce cancer in animals or man.

The ruckus is only the tip of the iceberg, because cyclamate makers, hard hit by the order, are working quietly behind the legislative scenes on government subsidies to recoup part of the losses when the \$100 million industry was virtually wiped out. Many feel that the dietary food provision is part of the ploy.

The entire matter has been clouded by surprise moves, sudden bureau decisions, and unexpected reactions from Congress and executive departments. In the meanwhile, an estimated 3 million patients need foods with non-nutritive

sweeteners as essential adjuncts to preventive therapy. Let's have a quick end to the politicians' handling of this matter and get it into the hands of the scientists.—R.B.K.



POSTGRADUATE CALENDAR

CIRCUIT COURSES

University of Mississippi Medical Center Circuit Courses will resume in the fall for the 13th consecutive year. Supported by a grant from E. R. Squibb and Sons, the postgraduate hometown refresher series is presented by the University of Mississippi School of Medicine, the Mississippi Academy of General Practice and the Mississippi State Medical Association. Circuit Courses on the 1970-71 roster will return to last season's eight host cities.

FUTURE CALENDAR

November 4, 1970

PULMONARY SEMINAR (TENTATIVE DATE)

December 11, 1970

GYNECOLOGIC AND OBSTETRICAL INFECTIONS SEMINAR

Dr. Lampton Named RMP Director

Dr. T. D. Lampton has been named director of the Mississippi Regional Medical Program headquartered at the University of Mississippi Medical Center in Jackson.

Former assistant MRMP coordinator, Dr. Lampton is a graduate of Millsaps College and the University of Mississippi School of Medicine, where he is a medicine assistant professor. He took his internship at the University of Texas Branch Hospital in Galveston and his internal medicine residency at the University of Mississippi Medical Center.

In 1968, Dr. Lampton joined the Medical Center staff as an instructor in medicine and MRMP categorical coordinator for stroke and heart disease. As director, he assumes a newly-created post, with Dr. Guy D. Campbell serving as Mississippi Regional Medical Program coordinator.



NEW MEMBERS

LEWIS, FREDRIC AUSTIN, Jackson. Born Fayetteville, Ark., November 30, 1939; M.D. Tulane University School of Medicine, New Orleans, La., 1965; interned Charlotte Memorial Hospital, Charlotte, N. C., one year; pathology residency, same, five months; radiology residency, same, Jan. 1967-Oct. 1969; elected May 5, 1970, by Central Medical Society.



DEATHS

DEAN, SARA RUTH, Canton. M.D., University of Virginia School of Medicine, 1922; interned University of Virginia Hospital, one year; residency, New England Hospital for Women and Children, Boston, Mass., 1923-1924; residency, Children's Hospital, Denver, Colo., 1926-1928; died Feb. 24, 1970, age 71.



PERSONALS

JOHN K. ABIDE of Cleveland announces the moving of his offices to 801 First Street. Dr. Abide was formerly located on Commerce Street.

JAMES W. ALLISON has associated with the Vicksburg Clinic in the department of general practice.

A. V. BEACHAM of Magnolia has been appointed by Gov. John Bell Williams to serve on the Mississippi Commission of Hospital Care. Dr. Beacham is a former director of the Alcoholic Beverage Control division.

HUGH L. BOYD announces the opening of his office for general practice at 1200 Washington Avenue, Ocean Springs.

LOUIS JENNINGS OWENS has associated with his father-in-law, CHARLES E. CATCHINGS of Woodville, in the practice of medicine at the Catchings Clinic.

DOUGLAS L. CONNER of Starkville is a member of the newly-formed committee of Mississippi business and professional leaders, whose purpose is to assist the state in moving peacefully into further school desegregation.

MARION E. COCKRELL, JR., of Laurel has qualified as a diplomat of the American Board of Obstetrics and Gynecology and is now a fellow of the American College of Obstetrics and Gynecology.

HARRIS VANN CRAIG of Natchez was speaker at a special Mississippi Heart Association-sponsored meeting for physicians from Natchez and adjoining areas. His topic was techniques of cardiopulmonary resuscitation.

WILLIAM N. CROWSON of Clarksdale has accepted the post of assistant chief of surgery at the Veterans' Administration Hospital in Memphis, effective Aug. 1. Dr. Crowson will also become assistant professor of surgery at the University of Tennessee School of Medicine in Memphis.

ROBERT DONALD of Pascagoula is that city's Jaycee of the Year. Dr. Donald was recognized at the special awards banquet for founding the Jaycee International Medical Supplies Project.

LEONARD W. FABIAN of Jackson and UMC was visiting professor at Montefiore Hospital in New York City recently.

ELMO P. GABBERT, formerly of Fayette, announces his association with J. W. HOLLINGSWORTH of Meadville for the general practice of medicine.

EPHRAIM S. GARRETT, JR., of Biloxi has received a "second diploma" in honor of the 50th anniversary of his graduation from Tulane University. Dr. Garrett attended the University's 1970 graduation when diplomas were presented to the 1920 graduates.

ARMIN F. HAERER of Jackson and UMC participated in a workshop sponsored by NIH on anticonvulsant levels. The conference was held in Warrington, Va.

JIM G. HENDRICK of Jackson has been appointed a member of the Committee on Public Information of the American Academy of Pediatrics. The seven-member committee was named by the AAP Executive Board as a permanent arm of the Academy.

GEORGE HENNEBERGER announces the opening of his office for the practice of obstetrics and gynecology at the Women's Clinic at 1618 Ingalls Avenue in Pascagoula.

LEROY HOWELL of Starkville has been notified of his passing the examination and other qualifications to become a diplomate of the American Board of Family Practice.

BEN B. JOHNSON of Jackson and UMC participated in the Mississippi Kidney Foundation program for the joint meeting of the Clarksdale Lions, Rotary, Exchange, and Civitan Clubs.

ANDY E. KIRK of Starkville announces the relocation of his office at 209 South Lafayette.

HERBERT G. LANGFORD of Jackson and UMC met with the American Heart Association risk factor screening committee in Minneapolis recently.

HAROLD G. MAGEE of Yazoo City was presented a Mississippi Jaycee Governor award by the Yazoo County Jaycees at their installation banquet. The award is a recognition of outstanding contributions to and achievement in the Jaycee organization.

JOHN A. MURFEE, JR., announces the opening of his office for diseases of the ear, nose and throat and plastic surgery of the head and neck at Medical Arts Building, 221 Seventh Street North, Columbus.

SHANTI PANDEY has opened offices for the practice of general medicine and specializing in obstetrics and gynecology at the corner of Harrison and Magnolia Streets in Fayette. He is associated with ENRIQUE FLECHAS.

BEN B. RADER, JR. has associated with WILLIAM E. LOTTERHOS, HARDY WOODBRIDGE, and BENJAMIN F. BANAHAN, JR. in the practice of family medicine at the Family Medical Center, 4660 McWillie Drive, in Jackson.

E. P. ROBBINS of Brookhaven announces the removal of his office from the Medical Building, 222 South Church Street, to 136 East Chippewa Street.

VIRGINIA TOLBERT of Ruleville gained a seat on the Ruleville Board of Aldermen in a runaway victory over three other contenders recently in a special municipal election.

JAMES C. TOTTEN, JR. of Pascagoula presented a program on air and water pollution in Jackson County to his medical society at its quarterly meeting. The Singing River Medical Society has now undertaken a study of pollution within Jackson County.

JAMES C. WAITES of Laurel has been elected to the board of directors of Laurel Federal Savings and Loan Association.

NOEL C. WOMACK, JR., of Jackson has been appointed chairman of the Task Force Committee on Health by WILLIAM E. LOTTERHOS of Jackson, chairman of the Governor's Committee on Children and Youth.

MSU Announces Seminar in Hypnosis

A new graduate course, Seminar in Hypnosis, has been introduced at Mississippi State University. The three semester hour course will be taught by Department of Educational Psychology associate professor, Dr. J. M. Woolington.

The course is designed to acquaint the student with the theoretical and applied aspects of hypnosis, stressing appropriate experimental and clinical techniques. Lectures will cover the major divisions: introduction to hypnosis, history, theories, suggestibility, phenomena, stages (depths) of hypnosis, psychodynamics of hypnotic induction, techniques and applications.

Registration will be open only to (1) advanced graduate students majoring in psychology or educational psychology, (2) students who are enrolled in medical or dental school, and (3) physicians, dentists, and psychologists who are currently employed but wish to increase their knowledge and proficiency in this area. Medical interns and residents are also eligible.

Seminars will be offered periodically according to demand. Initially, the course will be taught on campus one night per week, two and one-half hours per night, for fifteen weeks. The Division of General Extension is making future arrangements for offering the course anywhere in the state where need arises.

A minimum of between five and ten persons will be needed to materialize a class in a particular area. Estimated cost is about \$200.00 per person. Depending on the needs of the local individuals involved, the class could be conducted one or more nights weekly or on weekends to get in a total of 37½ hours of instruction.

Dr. Woolington has had 15 years of experience in this field and is qualified as an "expert witness" to give testimony in court in the field of hypnosis. He is a licensed psychologist and holds membership in the Mississippi, Southeastern and American Psychological Associations, American Orthopsychiatric Association, American Society of Clinical Hypnosis, and Society for Clinical and Experimental Hypnosis. He is a Diplomate in Experimental Hypnosis (American Board of Examiners in Psychological Hypnosis).

UMC Ups Faculty to 182

The University of Mississippi Medical Center has added 23 faculty members since January, 1970, upping the total of full-time medical and nursing faculty to 182.

Two new professors have joined the School of Medicine, Dr. James R. Dawson, Jr., pathology, and Dr. Joe Robert Norman, medicine.

Dr. Norman, who is Christmas Seal professor of pulmonary diseases and associate professor of physiology and biophysics, holds a B.S. degree from Howard College and an M.D. degree from the Medical College of Alabama. He did both his internship and residency at the Medical College of Alabama, where he was appointed instructor in medicine, advancing to associate professor.

Prior to his Mississippi appointment, Dr. Dawson had been chairman of the pathology department at the University of Minnesota School of Medicine since 1949. He earned B.A. and M.D. degrees from Vanderbilt University, where he also took his internship and residency. He is a former faculty member of Cornell University and Vanderbilt University Schools of Medicine.

School of Medicine additions at the assistant professor level include Dr. Ernst Schmidt, pharmacology; Dr. Jesse G. Mullen, anesthesiology; Dr. Thomas Sajwaj, psychiatry; Dr. Joseph Lincoln Arceneaux, microbiology; Dr. James M. Goodman, surgery (surgical illustrations) and department art director; Dr. H. Davis Dear, medicine, and Dr. Harris J. Granger, physiology and biophysics.

Instructor appointments in the medical school are Dr. Harvey N. Chapin, psychiatry; Dr. Robert J. Hamernik, anesthesiology; Malcolm Donald May, medicine (inhalation therapy); Ojus Malphurs, Jr., surgery (otolaryngology); Dr. Ronald Gordon Benson, obstetrics and gynecology; Dr. Ancel C. Tipton, Jr., medicine (neurology); Hays Williams, anatomy, and Dr. Lynda Lee, preventive medicine (medical genetics) and pediatrics. Miss Mary Joan Rouke is a new associate in obstetrics and gynecology in connection with the nurse midwifery program.

New School of Nursing faculty are associate professor Mrs. Themetris Emma J. Highsmith, assistant professors Mrs. Ethel R. MacArthur and Mrs. Helene A. Willingham and instructors Mrs. Barbara Kay Cater and Mrs. Landa Gayle Strum.

Family Planning Serves Four Counties

The State Board of Health's Family Planning Project is currently serving over 1800 patients in Hinds, Madison, Rankin and Warren counties, according to Dr. H. B. Cottrell, executive officer, State Board of Health.

An average of 21 clinics are held each month, and an average of 18 patients are seen at each clinic, according to Dr. W. E. Riecken, Jr., director of the project.

The project staff now consists of Dr. Riecken, a supervising nurse, three clerks and two health aides, working at a location on Woodrow Wilson Avenue.

This staff supplements the personnel of the various county health departments, and medical services also are provided by OB-GYN residents at the University of Mississippi Medical Center.

The staff also maintains a central register of family planning for Hinds County in cooperation with the Community Services Association (OEO) project in Hinds County.

A report by Dr. Riecken summarizing the activities of the program during its first ten months of existence (it began July 1, 1969) shows 207 clinics held and a total of 2217 visits by the 1822 patients.

The report also shows that 46 per cent of the women using the service expressed a preference for oral contraceptives, while 44 per cent chose intrauterine devices. Six per cent chose creams or foams, and three per cent chose use of a diaphragm, while one per cent chose various other means of contraception.

Occupational Health Congress Slated

The 30th Annual AMA Congress on Occupational Health is set for Sept. 30-Oct. 1, 1970, in Los Angeles.

Sponsored by the AMA Council on Occupational Health, the Congress will convene at the Century Plaza Hotel. The Congress program is acceptable for 12½ elective hours by the American Academy of General Practice.

The annual Physician's Award of the President's Committee on Employment of the Handicapped will be presented during the Congress program at noon, Oct. 1.

There is no registration fee, and all interested persons are invited to attend.



Format Announced for 103rd Annual Session; Exhibits, Essays Are Invited

The Council on Scientific Assembly has announced the schedule of section meetings for the 103rd Annual Session and invited papers and exhibits from the membership. The 1971 conclave is set for Biloxi May 3-6, 1971.



Dr. Martin

Dr. Raymond S. Martin, Jr., of Jackson, chairman of the 15-member council, said that the seven sections of the Scientific Assembly will meet on three of the four convention days with Monday reserved for the House of Delegates and reference committees.

"By issuing this early invitation," Dr. Martin said, "we hope to encourage the membership to participate actively by presenting papers and scientific exhibits."

The council's announcement said that members interested in presenting papers should send abstracts to appropriate section officers at the earliest date. The sections will choose in-state or member essayists by or before the end of the year, Dr. Martin said.

Expressing satisfaction that the 1970 scientific exhibit was the largest in annual session history, the council acted to add to participation incentives. The cash purse or honorarium for the best scientific exhibit by a member or members of the association will be continued, Dr. Martin said. In addition, there will be two honorable mention awards, and every author in the scientific exhibit will be presented with a certificate of participation.

The council will continue to separate scientific exhibits as to those presented by association members and out-of-state guests. Out-of-state exhibits are not eligible for the honorarium but do com-

pete for the Scientific Achievement Award, a bronze medallion.

The announcement said that Monday, May 3, will be devoted to the opening meeting of the House of Delegates at which Dr. Walter C. Borne-meier of Chicago, president of the American Medical Association, will speak. Reference committee meetings and hearings on resolutions and reports are slated for the afternoon segment of the first day.

The Scientific Assembly and all exhibits open Tuesday morning, May 4, with the general session on obstetrics and gynecology set for 9:00 o'clock. Surgery meets at 2:00 o'clock in the afternoon, and plans have been made for concomitant meeting that day of the Mississippi Chapter of the American College of Surgeons.

Three general sessions are scheduled for Wednesday, May 5, with the morning devoted to the general session on medicine. The afternoon programs, moved up half an hour to 1:30, include preventive medicine and general practice. An association-wide social occasion has been put on the evening agenda for Wednesday, the council said.

The closing day of the meet features simultaneous morning sessions of pediatrics and eye, ear, nose, and throat with the adjourned meeting of the House of Delegates and election of 1971-72 officers set for the afternoon.

Dr. Martin said that as many as 15 specialty society and related meetings will occur during the four-day convention. Another feature to be continued under a revised format is the medical motion picture program which will be presented daily at the conclusion of morning general sessions.

Members interested in presenting papers before any of the seven general sessions are encouraged to write section officers, furnishing an abstract of the proposed essay. 1970-71 section officers are:

—EENT: Dr. Richard L. Blount of Jackson,

ORGANIZATION / Continued

chairman, and Dr. James K. Williams of Pascagoula, secretary.

—General Practice: Dr. James O. Stephens of Magee, chairman, and Dr. W. Johnson Witt of Jackson, secretary.

—Medicine: Dr. C. Ralph Daniel, Jr., chairman, and Dr. S. H. McDonnial, Jr., secretary, both of Jackson.

—Obstetrics and Gynecology: Dr. William S. Cook of Jackson, chairman, and Dr. Warren Plauché of Biloxi, secretary.

—Pediatrics: Dr. John D. McEachin of Meridian, chairman, and Dr. John R. Jackson, Jr., of Hattiesburg, secretary.

—Preventive Medicine: Dr. Hugh B. Cottrell, chairman, and Dr. Frank M. Wiygul, Jr., secretary, both of Jackson.

—Surgery: Dr. M. Beckett Howorth, Jr., of Oxford, chairman, and Dr. Benton M. Hilbun of Tupelo, secretary.

Dr. Martin said that applications for scientific exhibit space should be addressed to him or the council at the state association headquarters, 735 Riverside Drive, Jackson 39216. Applications should be made in letter form, he added, and should include the title of the exhibit, names of authors, minimum requirements in linear feet of wall space, and any special requirements such as special electrical service or other needs not usually furnished by convention hotels.

The council said that plans are being made for medical alumni occasions and include Ole Miss, Tennessee, Tulane, and Vanderbilt. Additional innovations, designed to improve the value and attractiveness of the annual session, will be announced soon, Dr. Martin said.

AMA Staff Reorganizes

The AMA Department of Postgraduate Program has been divided into the Department of Medical Instrumentation and the Department of Scientific Assembly. The former will be directed by Dr. Ralph E. DeForest, and the latter by Ralph P. Creer.

This separation was decided upon by the AMA Board of Trustees at its meeting in Washington, D. C.

The Board also changed the name of the Committee on Emergency and Disaster Medical Care to the Committee on Emergency Medical Services. It asked the members to advance liaison

with state medical societies in order to stimulate wider planning and implementation of emergency and disaster care programs.

Dr. Mitchell Is New SBH Appointee

Dr. Shelby W. Mitchell, director of the Jones County Health Department for the past 14 years, has been appointed director of Local Health Services of the Mississippi State Board of Health, effective July 1.

He succeeds Dr. Steven L. Moore, who left the State Board of Health some six months ago to take over the directorship of State Comprehensive Health Planning.

In announcing Dr. Mitchell's appointment, State Health Officer Hugh B. Cottrell said, "Dr. Mitchell comes to the state health department with a keen knowledge of the operation of public health on a local level, and his direction and guidance to the state's 82 county health departments will make for an efficient overall operation."

In 1956, Dr. Mitchell became health officer of Jones County, and shortly thereafter Jasper and Covington Counties united with Jones to form a health district, which he has directed continuously.

Last December, Dr. Mitchell's responsibilities were greatly increased when he was named acting director of 12 county health departments in the central and southern part of the state—Lauderdale, Newton, Scott, Smith, Simpson, Copiah, Lamar, Forrest, Perry, Pearl River, Hancock and Harrison.

A native of Copiah County, Dr. Mitchell attended Copiah-Lincoln Junior College and earned the B.S. degree at Mississippi College and the M.S. degree at the University of Mississippi.

He completed the first two years of his medical studies at the University of Mississippi Medical School in Oxford, where he was president of his class, and received the M.D. degree from the Medical College of Alabama. He holds the degree of Master in Public Health from the School of Public Health, Tulane University.

Following his internship at Lloyd Nolan Hospital, Fairfield, Alabama, Dr. Mitchell returned to Mississippi and served as staff physician at Ellisville State School for one year before entering public health service.

Dr. Mitchell and his wife, Dr. Maura J. Mitchell, who is a practicing physician, make their home in Ellisville, where she is associated with the Ellisville State School.



Book Reviews

Symposium on Cancer of the Head and Neck—Total Treatment and Reconstructive Rehabilitation. By John C. Gaisford, M.D., Editor. 381 pages with 583 illustrations. St. Louis: The C. V. Mosby Co., 1969. \$31.50.

This symposium with 54 distinguished contributors was presented in Pittsburgh in Dec., 1968. The various authors present the overall management of head and neck cancer with emphasis on reconstructive rehabilitation by various plastic surgical technics.

A comprehensive survey of the problem is presented under ten separate headings. The subjects which were assigned to the individual authors are well covered. There are a few errors which were not corrected in proofreading. For example, on page 17 the dosage of Keflin is presented as 10 grams every four hours, far in excess of the recommended dosage.

The symposium was sponsored by the Educational Foundation of the American Society of Plastic and Reconstructive Surgeons, Inc. and will be chiefly of interest to plastic surgeons. The background material is of interest to other specialists who work in this field, as well as to general surgeons with a special interest in head and neck cancer surgery. Rapid changes in radiation therapy and chemotherapy, as well as in surgery, limit the period during which the decisions reached will be authoritative.

The sections on the surgical management of radioosteonecrosis of the head and neck and on problem tumors of the head and neck are particularly interesting.

The recorded round table discussions at the end of each of the ten sessions add to the enjoyment of the volume.

The book is definitely of interest to anyone seeking a broad view of head and neck cancer, and it will be of greatest interest to the plastic surgical resident and specialist.

W. C. SHANDS, M.D.

Personnel Administration and Labor Relations in Health Care Facilities. By James O. Hepner, Ph.D.; John M. Boyer; and Carl L. Westerhaus. 370 pages. St. Louis: The C. V. Mosby Co., 1969. \$15.00.

Probably the most compelling area in health care management today provides the subject of this volume. Inclusion of hospitals and similar institutions under the Fair Labor Standards Act and other related federal statutes has occasioned a marked increase in the "payroll increment" of institutional costs. On a national level, personnel cost represents approximately 70 per cent of the total operating costs of hospitals.

Another area that has entered the management picture with impact is that of labor relations. A concerted effort is being mounted by organized labor to unionize hospital and other health facility employees. Health care employees are particularly attractive to labor unions both as to their number and the potential dues dollar.

Our current health institution managers are not experienced in these areas simply because it has never been a "necessary" interest as to day-to-day operations. As a result most are finding it necessary to become knowledgeable and proficient in the shortest possible time in personnel management and labor relations.

The authors have produced a volume which should be useful to any person involved with the management of health care facilities, as well as to those who may have a continuing interest in the forces at work within the health care delivery system. Dr. Hepner teaches in a graduate program for health care administration while Messrs. Boyer and Westerhaus are personnel managers.

The first half of the book is devoted to a general overview of the hospital as an institution and its behavior, organization and economics. Personnel management and administration are viewed in conceptual terms. The latter chapters of the volume are more specific in dealing with personnel policies and procedures, legislation, collective bargaining, health manpower needs and training.

C. CHANDLER CLOVER, F.A.C.H.A.

UMC Establishes Home Dialysis Unit

Now dialysis patients at the University Medical Center can pack up and go home for good, taking their artificial kidneys with them.

A recently-established home dialysis training center enables patients to train at the Medical Center, then transfer to their own home units, expanding the UMC artificial kidney unit into a state-wide program.

By removing restrictions caused by the limited number of kidneys in the Jackson unit and drastically cutting the cost of dialysis, the home plan opens up the lid on how many Mississippi lives can be saved.

Hospital dialysis runs about \$10,000 per patient annually, while a home unit takes only around \$3,000 for supplies after the initial \$6,000 equipment outlay. The home training project is funded by the Department of Vocational Rehabilitation, the Kidney Foundation and other donors, including the Association of Operating Room



A late-June open house formally initiated the new home dialysis training center at the University Medical Center. The home program, established with \$30,000 in Kidney Foundation funds which were matched four-to-one by the Department of Vocational Rehabilitation's \$120,000 is aimed at teaching dialysis patients selfcare. Among principals were, from left, vocational rehabilitation state director John Webb, home dialysis patient-trainee David Lammons of Belzoni, assistant nursing supervisor Mrs. Peggy Baugh and Hinds County Kidney Foundation outgoing president Dr. H. C. Ricks.

Technicians and interested individuals. Additional support from Mississippi Regional Medical Program helps train the backup medical team.

The Kidney Foundation raised \$30,000 through private contributions, matched on a one-to-four basis with a \$120,000 grant from the Vocational Rehabilitation Department, which also helps qualified home patients in purchasing kidneys and first-year supplies.

Set up to train a class of four patients in an eight-week course, the home center will constantly be in use. As each group "graduates," a new class from the principal chronic unit will begin. Six "alums" are already home with their units and another class is in session.

Other health professionals, including physicians, nurses, technicians, dieticians, administrators and social workers can also take advantage of the new facilities. A Medical Center nephrology course, offered as part of the University of Mississippi Postgraduate Institute in the Medical Sciences, prepares hometown physicians to work with their patients' units.

The artificial kidney unit at the Medical Center, besides maintaining patients on the waiting list for home training, will ultimately serve as a mechanical and medical backup for home patients and continue to be an emergency unit for acute hospital inpatients.

This decentralization of the UMC unit, which will take dialysis-dependent patients through the main unit back to their homes, is aimed at eliminating long-term hospital care. And that goal, kidney unit officials agree, is gradually nearing attainment.

SBH Now Finances Immunizations

The State Board of Health picks up the tab, starting July 1, for immunization programs which, for the past eight years, have been largely federally financed.

One example is the measles program.

The federal Vaccine Assistance Act of 1962, through which federal funds bought vaccines in huge quantities for state use, was enlarged in 1965 to include measles vaccine.

The federal program expired a year ago, and the state now must buy most of its own vaccine.

Dr. Durward Blakey, director of the agency's Division of Preventable Disease Control, said that measles vaccine was ordered for the fiscal year starting July 1.

"There may be some counties," he said, "where reserve supplies have run low and where indi-

viduals asking for a measles immunization have had to have it postponed.

"But we now have adequate amounts to continue the maintenance program we began about a year ago, after the blitz which effectively cut down the measles threat."

The "blitz" to which Dr. Blakey referred saw the State Board of Health administer 300,000 doses of measles vaccine, starting in April of 1966, when the vaccine first became available.

"That massive effort," said Dr. Blakey, "enabled us to bring measles under control enough so that we now need smaller amounts of vaccine—enough for a good maintenance program."

The maintenance program, he said, immunizes children as they reach the age of one and involves private physicians as well as the State Board of Health. He called this "keeping up with the birth rate."

Some federal funds for vaccines, he said, are still available to the State Board of Health, but these funds are limited to immunizations for Rubella, or German measles—a major cause of birth defects.

Dr. Blakey noted an increase in measles in the state, with 65 cases of measles so far this year as compared to 24 cases for the entire previous year.

Dr. Blakey said this is not considered a serious increase, since "better surveillance" of measles cases could account for some of the increase.

He said measles immunization is important, however, and he said the supply ordered by the State Board of Health "is sufficient to maintain a safe level of immunization for the state."

Hospital Association Elects Officers

Lowery A. Woodall, executive director of Forrest General Hospital in Hattiesburg, was elected Mississippi Hospital Association president for 1970-71 at the 39th annual convention at Biloxi. Outgoing MHA president is Richard H. Malone, president of Hinds General Hospital in Jackson.

The new president-elect is James L. Townsend, administrator of East Bolivar County Hospital in Cleveland.

Malone was elected MHA delegate to the American Hospital Association, and D. A. Lingle, administrator of King's Daughters Hospital in Greenville, was named alternate delegate.

Named to the MHA Board of Governors were Thomas O. Logue, Jr., Southwest Mississippi Gen-

eral Hospital, McComb; D. Andrew Grimes, director of University Hospital in Jackson; and Charles W. Shepherd, Watkins Memorial Hospital in Quitman.

The delegates elected C. Philip Wimberly, Memorial Hospital, Gulfport, as Speaker of the House of Delegates, succeeding C. Chandler Clover, Doctors Hospital of Jackson.

Named to the board of Blue Cross were Fred Lavender, Noxubee General Hospital, Macon, and Lowery Woodall.

Dr. Dan Mitchell Is Alum President-Elect

Dr. J. Daniel Mitchell of Jackson has been named president-elect of the University of Mississippi Medical Alumni. He will take office in June, 1971.

Long active in organized medicine, Dr. Mitchell is a member of Central Medical Society, Mississippi State Medical Association, and the American Medical Association. He has served as chairman of the Public Health and Legislation Committee for Central Medical Society and is currently MSMA Mid-State vice president. He is secretary-treasurer of the Mississippi Medical Political Action Committee.



Dr. Mitchell

Committee.

Dr. Mitchell was assistant chief of staff at Hinds General Hospital and became Chief of Staff in 1969. He is a member of the Long Range Building Committee for Hinds General.

The Jackson general practitioner is a member of the Board of Directors for the Ole Miss General Alumni Association and served as a member of the Building Committee for the Medical Alumni House on the Jackson campus of the University. He is presently on the Steering Committee for the operation of the Medical Alumni House and is class representative of his medical class of 1954 for the UM Alumni Association.

He received his B.A. degree from the University of Mississippi and completed two years of medical school there before earning his M.D. degree from the University of Tennessee. Dr. Mitchell interned at St. Joseph Hospital in Memphis.

Surgery on Coronary Artery Course Set

The Adolf Gundersen Medical Foundation and the Wisconsin Heart Association will present a Symposium on "Surgery and the Coronary Artery—An Evaluation" on Sept. 23, 1970. The course will take place in Valhalla Hall, Wisconsin State University at LaCrosse.

Registration fee is \$10.00 and includes the printed proceedings of the symposium. Advance registration is required.

Program chairman is Dr. A. Erik Gundersen, Department of Thoracic Surgery, Gundersen Clinic, Ltd., of LaCrosse.

The course is approved for five hours post-graduate credit by the American Academy of General Practice.

Special guest speaker is Dr. Igor Shkotaba, Director of the Institute of Cardiology, Academy of Medical Sciences, Moscow, U.S.S.R.

Auxiliary Plans AMA-ERF Campaign



The Woman's Auxiliary to the Mississippi State Medical Association has begun working on its AMA-ERF campaign for 1970-71. At a recent meeting in the auxiliary's office in the state headquarters building, Mrs. Curtis Caine of Jackson, center, auxiliary president, discusses fund-raising plans with Mrs. Doyle P. Smith of Jackson, at left, incoming chairman, and Mrs. Arthur E. Brown of Columbus who has served as chairman for 12 years.

AMA President-Elect Is State Native

Dr. Wesley Whitfield Hall, the new president-elect of the American Medical Association, is a native of Mississippi.

He is a brother of Dr. Toxey Hall of Belzoni and Mrs. Elizabeth Stone of Shelby and a nephew of Judge Toxey Hall of Columbia.



Dr. Hall

Born in Lumberton, Dr. Hall was the son of Dr. and Mrs. Wesley Hall. The family moved to Ruleville in 1915 and later to Gunnison and Shelby. His father was a member of the State Board of Health for 16 years and served one turn as president.

Dr. Hall received his B.A. degree cum laude from Mississippi College in 1926, studied medicine at the University of Mississippi for two years and got his M.D. degree from Tulane University in 1930.

He served his internship and surgery residency at the Baroness Erlanger Hospital at Chattanooga, and then went into the practice of medicine and surgery at Shelby.

In 1943 he was one of three Mississippians elected a senior fellow of the American College of Surgeons.

Dr. Hall moved to Reno, Nev., that year and subsequently became secretary and then for several years president of the Nevada Medical Society.

He has served for 24 years either as delegate or member of the board of trustees of the AMA and was chairman of the board for two years.

The surgeon has served as chief of staff at both Reno hospitals, St. Mary's and Washoe General Hospital.

He spoke to the Mississippi State Medical Association at its 100th annual session in 1968 in Jackson.

Dr. Hall's son, Dr. Wesley W. Hall, Jr., a graduate of the University of Mississippi School of Medicine, completed his residency in surgery in Denver in July. He has joined his father in the practice of general surgery in Reno.

Mr. Whitaker Selected for USPHS Study

A Mississippian is contributing to the development of nationwide programs that are designed to improve patient care in hospitals and nursing homes.

Harold H. Whitaker, supervisor of the Health Insurance Unit of the State Board of Health, has been selected by the U.S. Public Health Service to serve on a panel of specialists that will review a course of study and 12 syllabi prepared for professional personnel involved with the Medicare and Medicaid programs.

The materials were developed recently by Tulane University, through contract with the USPHS, as a part of a program to upgrade services in hospitals, nursing homes and other facilities certified under Titles XVIII and XIX of the Social Security Act.

Whitaker, with other members of the reviewing panel, will be in New Orleans, July 14-16, auditing a prototype course now in progress at Tulane University and evaluating 12 short course training syllabi.

After modifications recommended by the panel, the 6-week course, entitled "Health Facilities Survey Improvement Program," will be offered to state surveyors through other universities in the United States.

The in-depth training syllabi that the panel will evaluate are designed to meet the needs of surveyors, consultants, and health facility administrators.

Each syllabus covers a subject area related to conditions that must be complied with by providers of health care under Medicare and Medicaid, such as physical environment, pharmaceutical services, nursing service and dietary service.

Joining the State Board of Health in 1966, shortly after it was designated as the survey and certification agency for providers of health services under Medicare, Whitaker assisted in selling up the Health Insurance Unit and has served as its supervisor for over four years.

Whitaker's responsibilities were expanded in early 1970 when the State Board of Health entered an agreement with the Mississippi Medicaid Commission to perform certification functions for the Medicaid program.

A native of Clarksdale, Whitaker received his B.S. degree in accounting from Mississippi State University. He was engaged in hospital administration for eight years prior to joining the State Board of Health.

CPR Course Offers Teacher-Training



A class of 16 instructors from across the state were in Jackson for a Cardiopulmonary Resuscitation Faculty Training Course, offered jointly by the Mississippi Heart Association, Mississippi Regional Medical Program and the University of Mississippi School of Medicine. Taught by a team of three, participants learned CPR techniques, as well as certain legal aspects. At left, Dr. John Busey of Jackson observes while Dr. James M. Cooper of Tupelo, right, practices on a resuscianne.

Family Practice to Give Second Exam

The American Board of Family Practice will give its second examination for certification in various centers throughout the United States. The examination will be over a two-day period on February 27-28, 1971.

Information regarding the examination and eligibility can be obtained by writing:

Dr. Nicholas J. Pisacano, Secretary-Treasurer, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington, Kentucky 40506.

HOUSE OF DELEGATES / Continued

association sources. We were most fortunate in paying no closing costs other than a recording fee of \$6.

Insurance. Necessary additional insurance coverage has been purchased, and we have had all mechanical equipment inspected by an independent safety engineer. The coverage includes natural and fire hazard losses, liability, medical payments, and mechanical equipment. We have also made the necessary adjustments in title insurance to protect the association's additional investment.

Expression of the Board. The Board of Trustees has commended the Building Committee and all associated with the project. The new and needed space is already contributing to greater office efficiency, and the association has a valuable, appreciating investment in our building.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

We commend the Board and those who worked actively in the building addition project. Our association now has new and useful facilities for the conduct of our affairs, and your committee urges every member of the association to visit his building and see this valuable asset. We approve the project and recommend adoption of the report.

The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "D" OF THE BOARD OF TRUSTEES

Your Board of Trustees, acting as the interim executive and governing body of your association, feel that we must speak to you frankly and candidly. We have carefully considered the content of this report and are unanimous in presenting it to you. We support it fully and ask that you, the House of Delegates, give it your most serious consideration. We realize that some of the recommendations are painful but, nonetheless, we feel that medicine will suffer the consequences if we, your elected officers, abdicate our responsibility to you. We must lead every member to devote himself personally and financially to meeting the many crises facing medicine. We have come to realize that we in medicine react to change but we seldom initiate change on our own.

The Crisis. The 1968 Legislature took office amid social, educational, and financial turmoil. In addition to local problems, local action was necessary to implement federal programs such as Title XIX. At your direction we launched an aggressive educational campaign to get Title XIX

implemented in Mississippi. Even though we spoke clearly, we could not make our voices heard in the Legislature. We failed completely and Title XIX was not passed in the first biennium. Our ineffectiveness was demonstrated again when the Legislature placed an optometrist on the State Board of Health in spite of our vigorous opposition.

The Extraordinary Session of 1969 was called to consider Medicaid along with other difficult issues. We again offered ourselves as consultants to the Legislature on this program of such vital concern to medicine. In spite of our diligent efforts, the program was written largely "without us." With certainty we did not lead in the enactment of the law.

The first annual Regular Session of 1970 showed the widening cleavage between organized medicine and the Legislature. Among the damaging legislation introduced were bills to:

—Add a pharmacist to the State Board of Health.

—License physical therapists and/or corrective therapists without examination, thereby destroying the four-year work of the medical and physical therapy associations to secure a sound law to protect the public.

—Provide that malpractice claims and those for negligence against physicians may be ordered paid by juries without corroborative medical evidence.

—Add two dentists (for a total of three) to the State Board of Health.

—Require the State Board of Health to grant licensure to osteopaths by reciprocity.

—Create a new State Board of Health with only one of nine members named by MSMA and transferring present physician-members to a new Board of Medical Examiners.

We expect no special or favored position with the Legislature but we do desire fair treatment and impartial hearings on matters relating to health and medical care. Over the years there have been many issues we have opposed but in 1970 we were attacked openly and we were forced to expend our time and our substance in fighting these threats.

Verbal excesses by some of the lawmakers reflected bitterness and animosity against the medical association. Late in February 1970, the difficulties seemed to peak. Your leadership requested a joint meeting with health committees of both chambers and our mutual problems were openly discussed. The message from the Legislators was unmistakably clear. It is not enough for us to have our staff carry messages, give written testimony

and for them to make day to day contacts. The senators and representatives asked for continual communication with their constituent physicians. We must commit ourselves in this connection.

After this meeting most of the damaging legislation was put aside. Even so, we were told to expect renewed onslaught in 1971. We were advised in writing that punishing legislation would be introduced and likely passed unless we formulate more adequate handling of malpractice claims and review. We were notified that our position against chiropractic is tenuous and passive and that this cult would probably be licensed in the future unless we formulated a positive program against it. While the scoreboard looks good in 1970, we must act decisively or anticipate serious and major reversals in the future.

On the positive side in 1970 we did manage to have two measures passed.

—Professional Corporation Law.

—Increased fees for autopsies when ordered by agencies of government.

Recommendations. We feel an intense personal commitment and financial sacrifice must be made by all our members if we are to be successful in meeting the challenge against medicine. To have a positive program we must develop policy positions before a session of the legislature meets. We must initiate legislation when indicated.

An informed membership can effectively counsel with their legislators. To keep the membership fully informed on all legislative issues the weekly legislative report should be sent to all members of the association.

The legislative council should meet frequently and not less than once monthly when the legislature is in session.

The Emergency Medical Care Unit must be continued. There should be increased participation from the ranks of medicine to assure a Doctor of the Day for every working legislative day.

An association executive must be at the capitol each working day.

Our participation in AMPAC and MPAC (Mississippi Medical Political Action Committee) should be increased and billings to all members under the policy previously adopted by the House of Delegates as to its voluntary aspects be made. We can also undertake to relieve volunteer physician-secretaries of component medical societies of dues-billing burden with the new and additional resources and in this way, we can increase the efficiency of our revenue collections. The two societies now billing for PAC dues produce virtually two-thirds of our PAC members.

To finance this positive program a dues in-

crease is mandatory. In 1969, the House of Delegates accepted a report that there would be a dues increase in 1971. We have an even greater need now. We therefore recommend a dues increase to \$100.00 annually. The \$40.00 increase earmarked as follows: \$10 for legislative and government relations, \$10 for peer review and medical service activities, \$10 for cost-of-living increases, and \$10 for the building.

The Gauntlet. We have other challenges and needs in addition to the legislative crisis. Medicine is under attack in the halls of Congress, in government programs and on the television networks. Specifically, we are challenged in legislation, public affairs, health care delivery, and peer review. We have the facility, the physical hardware and the staff core with capability and experience. We come to you, the membership, for adequate financing and personal commitment. We feel that the membership will give freely of their time and their substance if we present the true facts, unvarnished and of the whole cloth. If we ask less from you, we fail in our position of trust.

We do not stand alone in the battle against inflation, government encroachment, and a climate generally unfavorable to medicine. Other state associations and the AMA also have these problems. Most all of the state associations will have dues to the \$100 level by 1971. We must continue to support AMA as it works in our behalf at the national level. If medicine's house is divided between the national and local level it is not likely to stand.

We must have a viable peer review program or be swallowed up by society and government medical care programs. Can we equate the recommended dues increase with devastating malpractice legislation that would increase our premiums many times? Can we equate continued full support of AMA against national compulsory health insurance?

We have no guarantee that the positive program outlined in this report will assure us victory, but we do guarantee that no program will insure the defeat of medicine as we know it today.

Conclusion. Let all understand—we are asking you, the membership, for both financing and personal commitment. We must make up our minds to work unceasingly and to pay our bills. While we can guarantee no results our failure to act will guarantee the consequences. Let us pick up the gauntlet.

RESOLUTION NO. 5, FINANCIAL NEEDS OF THE ASSOCIATION

Delta Medical Society Delegation: Resolved,
That this House of Delegates endorses the prin-

HOUSE OF DELEGATES / Continued

ciple for the necessity of a dues increase for the Mississippi State Medical Association as will be proposed by the Board of Trustees at the 102nd Annual Session.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

This report of the Board challenges every member of the association to make a personal commitment of time and money to his association in behalf of the practice of medicine and improvement in the health care delivery system. We consider this challenge important and urgent and we approve the recommendations of the Board of Trustees for a dues increase effective in 1971 to \$100 with amounts of the increase earmarked for various activities, as recommended by the Board, which we feel must be supported.

Of equal importance is the request for a personal commitment from every member of the association. In our discussions, the Chairman of the Council on Legislation, Dr. C. D. Taylor, Jr. of Pass Christian, recommended that every physician in Mississippi be requested to give one day each year of his time to legislative activities and your reference committee feels that such a contribution would be of immense value in our programs.

We commend this recommendation to the membership and approve the report of the Board of Trustees.

Resolution No. 5, submitted by the Delta Medical Society, recognizes the need for increased revenues, and we approve the resolution and thank the society for its support in this matter.

In discussion, Dr. Lawrence W. Long on a point of inquiry asked if AMA dues were still compulsory in Mississippi, and the Speaker replied in the affirmative. The report of the reference committee was adopted.

SUPPLEMENTAL REPORT "E" OF THE BOARD OF TRUSTEES

Prior Actions. In 1958, the House of Delegates accorded constitutional status to the Grievance Committee whose purpose, according to our By-Laws, "shall be to prevent or resolve misunderstandings, to clarify and adjust differences between physician and patient, and to assist in maintaining high levels of professional deportment already established by the *Principles of Medical Ethics*." The committee, consisting of one member from each association district, has generally functioned in an appellate capacity and in

concert with grievance committees of component medical societies.

In 1968, the House of Delegates approved a program of Fee Review Committees for component medical societies, and more recently, medical organization has adopted the concept of peer review. This concept contemplates the functions of a grievance committee and fee review committee, but it also makes clear that this is a task for physicians.

The Board of Trustees believes that physicians should make judgments on the quality of medical care and professional compensation therefor. Under no circumstances should these tasks be delegated or given by default to nonmedical sources. We have witnessed, however, this trend in and among insurance companies, voluntary prepayment plans, and fiscal administrators for government medical care financing programs.

Peer Review. The American Medical Association strongly urges each state medical association to establish a peer review program. The Board of Trustees feels that we should make judgments in this connection and prove ourselves worthy to have our judgments accepted by medical care financing sources. There is no greater challenge before American medicine, and if we do not prepare ourselves to perform these tasks and promptly undertake them, we may be assured that they will be performed for us by others outside of medicine.

Many state medical associations, in response to the AMA peer review program, have organized themselves to carry out this important function which ought to be performed only by physicians. The Illinois State Medical Society has such a program, and agreements have been made with Medicare and Medicaid in that state for the medical society to perform peer review. The government payment sources have agreed to abide by the society's rulings.

This places great responsibility on medical organization, and such a program will require dedicated and energetic physicians on peer review committees and additional, competent staff. The Board of Trustees has begun implementation of this program with the appointment of a nine-member Committee on Peer Review as an *ad hoc* body. We propose to formalize this program into a single state-wide endeavor with the broadest possible participation, reservation of decision-making to the local professional community through component medical society committees, and continual liaison with medical care financing sources through our state association executive staff.

Objectives and Responsibilities. Peer review operates essentially in two areas, scientific and economic. Scientifically, we are concerned with the quality of medical care. We are interested in the organization and delivery of care and availability and accessibility. We are just as interested in problems of underutilization of health care resources and facilities as we are in problems of overutilization, a wasteful drain on manpower, facilities, and funds.

Economically, peer review is a two-way street. We are interested in fair and just compensation for quality services rendered, preferably under the concept of usual and customary fees which we also have endorsed. We are equally concerned when there is reason to believe that excessive charges have been made or when any charge relates to what physicians may determine to be an unnecessary service. We are interested in proper and optimum and maximum benefit use of the health care dollar, whether personal and out-of-pocket or from tax (public) sources.

We feel that the time has come to gather the functions of grievance committee work, fee review, and related activities under the single banner of peer review. We recommend that our association take the initiative in this respect and that we undertake these tasks with diligence and seriousness of purpose.

Program Formalization. The Board therefore recommends that our previously announced policy relating to fee review be re-applied to peer review and that Section 3, Chapter X, of the By-Laws prescribing the Grievance Committee be repealed and the following new section, identically numbered, be adopted:

Section 3. Peer Review. The Committee on Peer Review shall consist of nine members, one from each Association district, appointed for terms of three years each so as to provide for appointment of three members annually. Members of this committee shall not simultaneously serve on any disciplinary body of the Association or its component medical societies. To this committee shall be assigned the work of peer review, including but not limited to resolution of differences between patient and physician, review of the quality of medical care, adequacy and/or reasonableness of fees, whether due or paid from private or public sources, utilization of health care resources, and liaison with private and public sources of medical care financing. The committee is empowered to encourage a response from any member of the Association in writing or by personal appearance, authority to initiate investigations on its own motion, and authority to file

charges against a member in the name of the committee before the Judicial Council or a disciplinary body of a component medical society. Under no circumstances, however, shall the Committee on Peer Review exercise any disciplinary function nor shall it be empowered to alter the status or standing of any member. The committee shall be empowered to prescribe its rules of operation which shall not be in conflict with the policies or By-Laws of the Association.

Staff Support. For the committee to function effectively, it must enjoy substantial staff support in assembling quantities of data, in the conduct of liaison with insurance, prepayment, and administrative organizations, and in the preparation of communications and reports. Mindful of this need, the Board has provided for a qualified executive with adequate research and secretarial assistance and direct access in reporting to the Executive Secretary. The staff will also carry out the wishes and directions of the committee in communicating with counterpart committees of component medical societies.

Concomitant Recommendation. The Board has reported that the Legislature has advised the association in writing that unless a review activity is made available to patients, especially with reference to medicolegal problems, we may expect enactment of a measure which would permit payment of malpractice or negligence awards by juries without corroborative medical evidence. The Board recommends that each major medical community and component medical society reactivate physician-attorney committees so that the work of peer review may be continually communicated to the legal profession.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

The Board has initiated a peer review program at state level and in this report recommends that this program be extended to every component medical society of the association.

We recognize the importance and timeliness of a valid peer review system and its importance as an instrument of self-regulation. Your committee points out that peer review is in no way punitive but rather is educational and corrective.

We are pleased to see that the Board has planned extensive staff support for this program, and we recommend that the system of peer review as outlined in the report be instituted at the earliest possible time.

The report of the reference committee was adopted.

HOUSE OF DELEGATES / Continued

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

In its supplemental report on peer review, the Board of Trustees recommends repeal of Section 3, Chapter X of the By-Laws, presently providing for the Grievance Committee, and substituting therefor a provision for establishing a Committee on Peer Review, which will consist of nine members with terms of three years each.

The proposed amendment prescribes the duties of the committee. We approve this proposal and recommend that the following be added at the end of the new section: "The committee shall also encourage and assist component medical societies in forming Committees on Peer Review at the local level."

We recommend adoption of this amendment to the By-Laws, as amended.

The report of the council, acting as a reference committee, was adopted.

SUPPLEMENTAL REPORT "F" OF THE BOARD OF TRUSTEES

Resolution No. 6. At the 101st Annual Session in 1969, the House of Delegates adopted Resolution No. 6, subject: Professional Corporations, introduced by the West Mississippi Medical Society. The resolution recommended association approval of incorporation by physicians in an effort to achieve greater tax equity and to enjoy business privileges long available to other endeavors. The resolution directed that necessary legislation be drafted and introduced in the 1970 Regular Session of the Mississippi Legislature.

Enactment. The association-sponsored measure was House Bill 48, introduced in our behalf by Hon. Fred Lotterhos of Hinds County. We received valuable guidance and assistance by the House Committee on the Judiciary to which the bill was referred and especially from the chairman, Hon. H. L. Merideth of Washington County. The association presented testimony in support of the measure on three occasions.

The enactment amends Section 5390-42 of the Mississippi Code of 1942, Annotated. It defines "professional service" as a personal service to the public which "requires as a condition precedent the obtaining of a license or other legal authorization and which prior to the passage of this act and by reason of law could not be performed by a corporation."

We were also successful in securing the privilege of incorporation by solo practitioners, as requested by a floor amendment to Resolution No. 6 at the 101st Annual Session.

Benefits. Not every physician will find it profitable or even economical to incorporate, and the Board of Trustees advises members to consult legal counsel and personal auditors (C.P.A.'s) as to their individual circumstances, potential advantage, and possible disadvantage. The Board also advises that financial vehicles be chosen with care from among the many reliable sources available. Benefits available are many and substantial, because the Mississippi enactment confers upon professional incorporators the benefits of the Mississippi Business Corporation Act or that relating to conventional corporations. Among these benefits are:

—Deferred compensation (retirement) plans qualified under Section 401(a) of the Internal Revenue Code of 1954, permitting full deduction from federal taxes of contributions to such plans.

—Progressive vestment under such plans where the beneficiary shall have been deemed to have received no income until actual payment of benefits.

—Group life insurance with premiums fully deductible.

—Death benefits up to \$5,000 without taxation either to the professional corporation or to recipients.

—Sick pay with tax exclusions up to \$100 per week.

—Workmen's Compensation, exclusion from gross income of travel expense, meals, and lodging under certain circumstances, and other miscellaneous benefits.

Expression. The Board of Trustees expresses satisfaction over the success of this project and expresses appreciation to the membership, the Legislature, the Governor, and all concerned with the full and final implementation of Resolution No. 6.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

In response to Resolution No. 6 adopted at the 101st Annual Session in 1969, the association sponsored legislation during the 1970 regular session to amend appropriate statute to provide for professional corporations for professional individuals.

The Board informs us that the sound and useful law was enacted and we express our appreciation to the Legislature for this enactment.

We caution all members of the association who contemplate incorporation to consult with tax advisers and legal counsel.

The report of the reference committee was adopted.

REPORT OF THE SECRETARY-TREASURER

Dr. Walter H. Simmons: Duties and Responsibilities. As an elected general officer of the association, your Secretary-Treasurer is charged with such duties as ordinarily devolve upon the secretary of a corporation by law, custom, and usage. Additionally, he is the constitutional designee as chairman of the Council on Scientific Assembly and member *ex officio* of councils and committees.

Membership. The modest but encouraging growth trend in membership continued through 1969 with an increase of about 5 per cent. The total as of Dec. 31, 1969, is:

- 1,331 paid Active members
- 68 Emeritus members
- 46 members exempt from dues other than Emeritus

This is a total of 1,445 for 1969, representing a net gain of 66 members over 1968. The total for 1970 membership as of May 5 is:

- 1,311 paid Active members
- 68 Emeritus members
- 37 members exempt from dues other than Emeritus

Fiscal Reporting. In accordance with usual practice, your Secretary-Treasurer submits a condensed statement of your association's fiscal condition as an attachment to this report. The Council on Budget and Finance has reviewed the report of audit, fiscal records, and has reported to the Board of Trustees in this connection. An overall budget of \$215,741 has been recommended to and approved by the Board of Trustees, and a copy of the budget is attached to this report. This amount is exclusive of funds which the association will expend in payment of professional fees and authorized benefits under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) which will be reimbursed to the association by the Department of Defense. It is projected that these funds will amount to about \$1.8 million in 1970.

Constitutional Duties. Your Secretary-Treasurer, as an *ex officio* member of councils and committees, meets with various official bodies of the association and sits with the Board of Trustees as a general officer. Activities related to service as chairman of the Council on Scientific Assembly have been reported separately.

MISSISSIPPI STATE MEDICAL ASSOCIATION CONDENSED STATEMENT OF FINANCIAL CONDITION DECEMBER 31, 1969

ASSETS

<i>Current Assets</i>		
General Fund		
Cash on deposit	\$137,208	\$
Due, JOURNAL advertisers	4,591	

Due, CHAMPUS	38,499	
Other receivables	704	
Prepaid expenses	810	181,812
<i>Fixed Assets</i>		
Building and equipment, less depreciation	172,403	
Land	13,605	186,008
<i>Other Assets</i>		
Deferred CHAMPUS expenses	3,340	
Refundable deposits	25	3,365
Total book assets		\$371,185
LIABILITIES AND NET WORTH		
<i>Current Liabilities</i>		
Accrued expenses	\$ 4,796	\$
Construction contract payable	24,761	
AMA dues in transit	16,670	
AMA dues pending	245	
CHAMPUS capitalization	100,000	
Current mortgage	14,808	
Accrued taxes	4,499	
Accrued interest payable	908	
Accounts payable, CHAMPUS	108	166,795
<i>Long Term Liabilities</i>		
Mortgage	52,732	
Deferred income	13,766	66,498
<i>Net Worth</i>		137,892
Total liabilities and net worth		\$371,185

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

Your reference committee appreciates the report of the Secretary-Treasurer, Dr. Walter H. Simmons of Jackson. We are encouraged by the stability and modest growth of membership and we commend Dr. Simmons for his work in our behalf, both as Secretary-Treasurer and as Chairman of the Council on Scientific Assembly.

We approve the report and recommend its adoption by the House of Delegates.

The report of the reference committee was adopted.

REPORT OF THE COUNCIL ON BUDGET AND FINANCE

Report of the Secretary-Treasurer. We have considered the fiscal portion of the report of the Secretary-Treasurer, and we have examined the operation of the association with respect to all fiscal activities, including the report of the independent certified public accountant. The findings are to the satisfaction of your council. Prior to this annual session, we have met for this purpose and conferred with the Board of Trustees. We have determined that all accounts, receipts, and disbursements are regular, proper, and authorized.

Association Budget. We have considered the 1970-71 budget for operation of your association, and we have conferred with the Board of Trustees who have approved our recommendations. Each item in the budget has been carefully evaluated as to necessity and adequacy. We recommend a total budget of \$215,741.00 for general operation of all activities in departments of the as-

HOUSE OF DELEGATES / Continued

sociation, including production of your JOURNAL. The overall budget is exclusive of professional fees for the CHAMPUS Program which are reimbursed to the association by the Department of Defense. For 1970, we estimate that this amount will be \$1.8 million. We recommend adoption of the budget as being a realistic minimum for the continued effective operation of your association.

Insurance and Safeguards. We have examined a survey of insurance owned by the association on its properties and against certain liabilities which conceivably could be incurred, and we find it adequate. We have also examined the additional insurance which has been obtained on the building addition, including increased title insurance and insurance on all mechanical installations which have been inspected by an independent safety engineer. Suitable safeguards for disbursement procedures, the handling of incoming funds as recommended by our certified public accountant, and proper safeguarding of records have been provided and each has been examined by your council. We find these to be adequate and sufficient for our needs.

Service to Component Medical Societies. Your council has determined that the central office is able to offer a new service to component medical societies of the association with reference to membership. Effective this year and for the 1971 membership year, the central office will prepare statements and bill physicians directly for component society, state association, AMA dues and voluntary AMPAC and MPAC dues, furnishing a postage-paid, return envelope with the billing. We believe this will add greatly to the efficiency of our dues collections and that it will ease a great burden from volunteer physician-secretaries of component medical societies.

No billing will be made unless clearance has been obtained from the component medical society.

The report of the council was adopted.

REPORT OF THE EXECUTIVE SECRETARY

Mr. Rowland B. Kennedy: Scope of Report. Your Executive Secretary, under the By-Laws, reports to the Board of Trustees, and as such has submitted about 70 written reports during the 1969-70 association year. The present report is one of highlights and of the headquarters staff. It is purposely abbreviated to avoid any lengthy duplication or any discussion of association policy.

Executive Staff. With authority from the Board of Trustees, the staff was reorganized in June

1969 into working departments. A new Executive Assistant was appointed and assigned general accounting and internal management duties, and the Department of Medical Care Plans was expanded to accommodate the growing CHAMPUS program which increased more than 50 per cent in 1969. We were also fortunate in securing a journalism graduate to serve as Editorial Assistant for your JOURNAL.

Since the 1969 annual session, the staff has been expanded by four, and more recently, the Board has authorized appointment of a third executive in an effort to cope realistically with growing challenges in legislation and other critical activities. We remain understaffed for assigned and necessary duties.

We can, however, measure improvements and results as the staffing pattern becomes more realistic. Your Executive Secretary has recommended that further additions be authorized by the Board in the interest of association programs and support for official bodies.

Legislation. Two sessions of the Legislature have been conducted since the 1969 annual session, and the interests of physicians and medicine are frequently at stake in pending laws and programs. The Board has concurred in a proposal to intensify our legislative communications to all members. Virtually all additional staff recommended will serve in legislative activities and in medical service programs.

Building Addition. The staff was privileged to serve in a coordinating capacity with the Building Committee in the urgently needed building expansion project. We deeply appreciate the addition which was essential to basic association services and support of official programs and activities. The refurbishing of your original 14-year-old building concomitantly with the construction of the addition has given the association a valuable working facility as well as a sound investment.

Workload and Service Potential. With a well-trained and experienced staff core, we have the capability of furnishing needed support for growing responsibilities and challenges in activities. The past year was a difficult one for your staff, because no previous year required more productivity in legislation, government relations, association programs, medical care plans administration, or in our share in the construction project.

We stand ready to offer the membership additional services, and we are uniquely situated to do so with core experience, data processing hardware, more adequate office facilities, and updated equipment. Of particular value is the physi-

cians' data management service which can be furnished much less expensively than comparable commercial services. We invite your appraisal of this proposed service in the Technical Exhibit of the present annual session.

The Board has recognized that we have special need for executives, and none need be reminded that the years of the '70's will try sorely the capacity of the association to carry out the wishes and objectives of the membership.

Personal Expression. The new association year will mark my 20th as your Executive Secretary. The decade ahead will be difficult, but your executive staff pledges its best efforts to serve you in meeting the challenge to deliver more and better medical care under our private system. I am deeply grateful to the Board of Trustees, general officers, official bodies of your association, and to the component societies for the opportunity of working in your behalf.

REPORT OF THE REFERENCE COMMITTEE
ON REPORTS OF OFFICERS AND
BOARD OF TRUSTEES

The committee is pleased with the report of the Executive Secretary and would like to take this opportunity to recognize the 20th anniversary of his service to the association and the excellence of his performance in the various aspects of his duties during all these years. We remind the House of Delegates and the Board of Trustees of his statements concerning the work load of his staff, and we commend them for emulating his example of excellence.

Applause from the House of Delegates was given the report of the reference committee on the Report of the Executive Secretary, and the report was adopted.

REPORT OF THE THE COMMITTEE
ON AMA-ERF

Dr. Raymond F. Grenfell: Organization and Duties. Your Committee on the American Medical Association Education and Research Foundation is an *ad hoc* body of the House of Delegates. Its principal duty is to encourage members of the association and the Woman's Auxiliary to support AMA-ERF with voluntary, tax-deductible contributions. Every dollar received goes to medical education or research, and the donor may even earmark his gift for a particular institution. No administrative expense for the conduct of fund-raising campaigns comes from gifts: At national level, AMA pays the full cost of foundation administration, and at state level, the association pays for all solicitation costs.

1969 Contributions. Last year, our total gift to

the University of Mississippi School of Medicine and Medical Center was \$12,099.97, representing \$9,410.17 contributed by Mississippi physicians and Auxiliary members. The remainder represents undesignated gifts which are equally distributed among all accredited four-year medical schools by AMA-ERF.

1970 Program. Our total contributions declined in 1970, and we have presented the University with \$11,102.40, representing \$8,615.94 earmarked for the school and \$2,486.46 in the undesignated foundation fund distribution. This year our per capita physician gift remained higher than those in our four neighboring states:

State	No. M.D.'s	Total	Per M.D.
Alabama	2,122	\$ 630.00	\$.30
Arkansas	1,288	995.00	.77
Louisiana	2,170	3,685.00	1.69
Mississippi	1,429	6,330.00	4.43
Tennessee	2,891	8,888.00	3.09

Our Auxiliary gave \$2,682.56 in the 1970 campaign, a commendable increase over the 1969 total of \$1,750.43. We continue to work with the University in solicitation mailings, and we thank our president, Dr. James L. Royals, for his support in this work. We urge every association and Auxiliary member to contribute next year.

REPORT OF THE REFERENCE COMMITTEE
ON MISCELLANEOUS BUSINESS

Your reference committee considered the annual report of our Committee on AMA-ERF, and we are extremely gratified to note that Mississippi physicians continue to give more on a per capita basis to medical education than physicians in Arkansas, Louisiana, Tennessee or Alabama. We encourage this program and ask that the association continue to support it by solicitation of all physicians for voluntary contributions to medical education. We approve the report of this committee and thank the members for their good service to medical education and to our association.

The report of the reference committee was adopted.

AUXILIARY OFFICERS

The Speaker presented Mesdames Louis C. Lehmann of Natchez, 1969-70 President of the Woman's Auxiliary to the Mississippi State Medical Association, and Curtis W. Caine of Jackson, 1970-71 President, who addressed the House of Delegates.

1970 MSMA-ROBINS AWARD

President Royals presented the 1970 Mississippi State Medical Association-Robins Award to Dr. W. J. Aycock of Calhoun City for outstand-

HOUSE OF DELEGATES / Continued

ing community service by a physician. Mr. Willard Duvall of New Orleans, district manager for A. H. Robins Co., assisted Dr. Royals in the presentation.

SCIENTIFIC EXHIBIT AWARD

Dr. Walter H. Simmons, chairman of the Council on Scientific Assembly, presented the Aesculapius Award, an honorarium of \$500, to Dr. James P. Spell of Jackson for the best scientific exhibit by a member. Dr. Spell's exhibit was "Systemic Clues to Occult Cancer."

RESOLUTION NO. 1, IN MEMORIAM

Dr. Walter H. Simmons: WHEREAS, There are absent from among our numbers 21 members who have been called by Divine Providence since the 101st Annual Session; and

WHEREAS, Although we are grieved upon the passing of these beloved colleagues and friends, we are inspired by their lives of service and professional attainment; and

WHEREAS, This expression of our grief, deep affection, and respect should be recorded permanently among official records of the Mississippi State Medical Association, now therefore, be it

Resolved, That this House of Delegates does mourn the passing of the following esteemed colleagues:

John C. Adams, Greenwood, August 28, 1969
William H. Anderson, Booneville, May 9, 1969
George G. Armstrong, Sr., Houston, November 17, 1969

John R. Bane, Jr., Jackson, October 26, 1969
James E. Coe, Lambert, June 18, 1969
J. Kenneth Cooke, Houston, Texas, February 11, 1970

James H. Fox, Jackson, January 8, 1970
Thomas W. Frazier, Crawford, May 11, 1969
Edward L. Gilbert, DeKalb, July 11, 1969
James C. Green, Tupelo, December 3, 1969
Percy P. Haslitt, Ocean Springs, May 19, 1969
Isaac C. Knox, Sr., Vicksburg, September 1, 1969
Luther L. McDougal, Tupelo, December 12, 1969

Junius K. Oates, Laurel, July 22, 1969
B. B. O'Mara, Biloxi, May 24, 1969
Luther B. Otken, Greenwood, November 25, 1969

Daniel H. Raney, Mattson, November 27, 1969
Milton H. Robertson, Corinth, March 13, 1970
George T. Warren, Brookhaven, May 30, 1969
Oliver B. Wingo, Sardis, January 31, 1970
Maurice R. Wingo, Pass Christian, October 25, 1969

ACTION OF THE HOUSE OF DELEGATES

Without objection, Resolution No. 1 was acted upon without referral and adopted by the House of Delegates with all present standing in silent tribute.

RESOLUTION NO. 2, AMENDMENT OF ABORTION LAWS

Dr. J. Purves McLaurin, Jr.: WHEREAS, Mississippi law prohibits abortion except where continuation of the pregnancy poses a threat to the life of the patient or where the pregnancy results from forcible or statutory rape, and

WHEREAS, A significant number of states have recognized that abortion may be lawfully performed when one of the foregoing conditions prevails or when the pregnancy results from incest, when continuation of the pregnancy poses a threat to the health of the patient, and/or when, in cognizant medical opinion, there is a probability that the infant will be born deformed, and

WHEREAS, The American Medical Association and the American College of Obstetricians and Gynecologists have respectively approved abortion under any one of the foregoing conditions, and

WHEREAS, There is strong opinion among citizens of the state and the medical profession that the Mississippi law should be amended to reflect these additional socially and medically acceptable conditions under which this procedure may be performed, now, therefore, be it

Resolved, That the policy of the Mississippi State Medical Association be that abortion should not be performed except when (1) the pregnancy results from forcible or statutory rape or from incest, (2) continuation of the pregnancy poses a threat to the life or health of the patient, or (3) when, in cognizant medical opinion, there is a probability that the infant will be born deformed and that the procedure be undertaken by a physician only (1) when consultation has been obtained in writing from another physician and (2) the procedure is performed in a licensed hospital, and be it further

Resolved, That this policy in no way alters the association's long-standing view that criminal or illicit abortion be vigorously prosecuted under applicable criminal law, and be it further

Resolved, That amendments in existing Mississippi law be sought to implement this policy during the 1971 Regular Session of the Mississippi Legislature.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This resolution proposes that the policy of the association be that abortion should not be per-

formed except when (1) the pregnancy results from forcible or statutory rape or from incest, (2) continuation of the pregnancy poses a threat to the life or health of the patient, or (3) when, in cognizant medical opinion, there is a probability the infant will be born deformed and the procedure be undertaken by a physician only (1) when consultation has been obtained in writing from another physician and (2) the procedure is performed in a licensed hospital.

This proposal in no way alters the association's long-standing policy that criminal or illicit abortion be vigorously prosecuted under the applicable criminal law. We approve this resolution and recommend its adoption by the House of Delegates. We further request that necessary legislation be drafted and submitted to the 1971 regular session.

The report of the reference committee was adopted.

RESOLUTION NO. 3, LIMITED LICENSURE OF PHYSICIANS

Drs. Richard C. Fleming, Jr., and William M. Gillespie, Jr.: WHEREAS, There presently exists a serious shortage of physicians in the state of Mississippi, with a doctor-population ratio of 1:1,400 as compared with the national average of 1:700, and

WHEREAS, The physician shortage is especially acute in many of the State-operated institutions—medical and surgical (charity) hospitals, mental hospitals, mental retardation school, tuberculosis sanitarium, county public health departments, and penal institutions, and

WHEREAS, In an attempt to provide more adequate medical and health care to the patients served by such State-operated institutions, it has been necessary for many years to employ the services of certain carefully-selected and competent Foreign Medical Graduates, who are not eligible, due to lack of U. S. Citizenship and/or non-possession of ECFMG certification, to be examined for full Mississippi medical licensure, and

WHEREAS, The impending application of most of these same State-operated institutions to participate in Medicare and Medicaid requires that all physicians providing care in these institutions be licensed, in some form, to practice medicine by the State of Mississippi, and

WHEREAS, Many other States in this country already have provision for the granting of limited or institutional licensure, for practice restricted to the institutions of employment, and

WHEREAS, There is, at present, no provision for any form of limited or institutional licensure to practice medicine in a restricted capacity in the State of Mississippi, now therefore, be it

Resolved, That the Mississippi State Medical Association, through affirmative action of its House of Delegates, requests the State Board of Health to expedite the establishment of a category of limited or institutional licensure, annually renewable, for certain carefully selected foreign medical graduates on the recommendation of the superintendent and/or board of trustees of the state institution, the component medical society in whose professional jurisdiction the institution is located, the state medical association Trustee in that district, and the medical member of the State Board of Health in that Public Health District.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

This resolution asks that certain carefully selected foreign medical graduates be given limited licensure in order to serve in certain institutions operated by the State of Mississippi. We concur in this resolution, recommending only a minor change in the resolving clause. We recommend that the resolving clause be amended as follows:

“Resolved, That the Mississippi State Medical Association through informative action of its House of Delegates request the State Board of Health to expedite the establishment of a category of limited institutional licensure, annually renewable, for certain carefully selected foreign medical graduates on recommendation of the superintendent and the board of trustees of the State institutions, the component medical society in whose professional jurisdiction the institution is located, the state medical association Trustee in that district, and the medical member of the State Board of Health in that public health district.”

We feel that this will assist in alleviating to some extent the shortage of physicians in this state and meet the challenge of certain medico-legal urgencies which we face.

Your reference committee recommends the adoption of Resolution No. 3, as amended.

The report was discussed by Drs. Dewitt Hamrick of Corinth, H. C. Ricks, Sr., of Jackson, C. D. Taylor, Jr., of Pass Christian, James Grant Thompson of Jackson, Guy T. Vise of Meridian. President Royals reported receiving a telegram stating that the Mississippi Psychiatric Society opposed the resolution.

The report of the reference committee was adopted.

RESOLUTION NO. 4, STATUTORY STANDARDS OF PRACTITIONERS

Dr. Lawrence W. Long: WHEREAS, The Mississippi State Medical Association is dedicated to the conservation and protection of the health of all citizens, and

WHEREAS, The cult of chiropractic constitutes

a hazard to rational health care because it is a false dogma based on a totally unscientific premise and whose practitioners rigidly adhere to their irrational, unscientific beliefs, and

WHEREAS, The State of Mississippi, through the wisdom of its Legislature, has consistently rejected the repeated demands of the cult of chiropractic to be licensed and accorded the sanction and badge of respectability by the state, and

WHEREAS, The position of the Mississippi State Medical Association is substantiated by an overwhelming preponderance of documented, scientific evidence and by the formal findings and declarations of the United States Government, and

WHEREAS, In this era of scientific advancement there cannot be permitted to exist a double standard of health care for the citizens of Mississippi, one scientific and one cultist, now, therefore, be it

Resolved, That the House of Delegates of the Mississippi State Medical Association directs that whatever legislation is necessary be drafted and introduced in the next Regular Session of the Mississippi Legislature to require that chiropractors and any other practitioners who hold themselves out as competent to diagnose and treat human disease must meet the same standards of education and training as doctors of medicine.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

This resolution offers a positive program for combating the cult of chiropractic in Mississippi. We heard excellent testimony in this connection, and we are grateful for the presence of Mr. Doyl Taylor, Director of the AMA Department of Investigation, Chicago, who came to our convention to assist us in this respect.

The Legislature has stated that unless the association adopts a positive program on chiropractic that we are likely to have a licensure law in the immediate future. We feel that this is a positive program, and it roughly approximates the decision handed down by the U. S. Supreme Court in the case of *England v. Louisiana*. This would achieve, in effect, in statute what was achieved by court decree in the Louisiana case.

We earnestly recommend that the Board of Trustees and the Council on Legislation work vigorously to implement this resolution in the 1971 regular session of the Mississippi Legislature. We approve the resolution and urge all members to support the implementation.

The report of the reference committee was adopted.

Dr. Walter H. Simmons: WHEREAS, The By-Laws of the American Medical Association provide that a member, upon request, may be exempt from dues for life when, on January 1 of the year for which the exemption is to become effective, he has attained the age of 70, and

WHEREAS, The By-Laws of the Mississippi State Medical Association, while providing many and liberal bases for exemption from dues but which provide no basis for such exemption by reason of having attained age 70, and

WHEREAS, It is fitting and appropriate that loyal members of the association, upon attainment of age 70, be recognized by relief from dues upon request and that there be a parallel basis for such exemption with that of the American Medical Association, now, therefore, be it

Resolved, That Section 4(a), Chapter I, By-Laws of the Mississippi State Medical Association, is amended to add at the end of the section: "Members who shall have attained age 70 and who have been active members of the association for any 10 consecutive years may, upon request, be exempt from dues for life effective January 1 after the 70th birthday, and such exemption shall continue so long as the member continues in good standing in his component medical society."

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

The purpose of this resolution is to bring into agreement certain provisions relating to active membership between the state medical association and AMA.

To accomplish this purpose, it is necessary to amend Section 4(a), Chapter I of the By-Laws to provide that "members who shall have attained age 70 and who have been active members of the association for any ten consecutive years may upon request be exempt from dues for life effective January 1, after the 70th birthday and such exemption shall continue so long as the member continues in good standing in his component medical society."

We approve this amendment and recommend its adoption.

The report of the council, acting as a reference committee, was adopted.

RESOLUTION NO. 7, BURDENS OF MEDICAID UPON PHYSICIANS

Dr. Norman W. Todd: WHEREAS, The Mississippi State Medical Association supported enactment of a Medicaid program in its commitment and desire to continue to render the best possible

medical services to all citizens of our state, and

WHEREAS, This program is administered and directed by a statutory commission of the State of Mississippi which is duly empowered to prescribe regulations and administrative practices, and

WHEREAS, The Mississippi Medicaid Commission has published a Physicians' Manual containing regulations and administrative requirements which place burdensome and time-consuming paperwork tasks upon physicians in practice, and

WHEREAS, Claims forms prescribed are needlessly complex, requiring employment of additional clerical personnel in physicians' offices, and procedures for securing professional compensation for care of Old Age Assistance recipients under Medicare and Medicaid are unrealistically complicated and costly in time and money to practitioners, and

WHEREAS, Payment services under Medicaid are excessively slow and uncertain, now, therefore, be it

Resolved, That the Mississippi State Medical Association, while reaffirming its commitment to render the best possible medical services to all citizens, does protest and condemn the excessively burdensome regulations and requirements of the Mississippi Medicaid Commission, does call for elimination of these bureaucratic measures which contribute nothing to medical care, and does call for simplification of paperwork associated with the filing of claims and for payment of such claims within reasonable periods of time.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL PRACTICES

This resolution points out that the Medicaid Program requires extensive use of complex forms, resulting in paperwork burdens upon practitioners.

We approve the resolution but recommend adoption of the following substitute resolving clause:

Resolved, That the Mississippi State Medical Association while reaffirming its commitment to render the best possible medical services to all citizens does protest the excessively burdensome regulations and requirements of the Mississippi Medicaid Program, especially the amount of paperwork associated with claims filing, and does request that forms be simplified and clarified by the commission by December 31, 1970, and be it further

Resolved, That Old Age Assistance patients be served by submission of a single claim to be Part 1-B, Medicare carrier which, in turn, would generate the necessary claim for the Medicaid Program, and be it further

Resolved, That the association does offer its services to the commission in achieving these goals to improve the program and to lessen burdens upon practicing physicians."

Your Reference Committee recommends approval of the resolution as amended.

Dr. Clyde A. Watkins of Sanatorium moved to amend the substitute resolving clause by inserting the words "board of trustees of the" immediately following the words "does offer its services to the" in the third "resolved" and the motion was seconded by Dr. Frank M. Davis of Corinth. The motion to amend was adopted, and the main motion was adopted as amended.

RESOLUTION NO. 8, MEDICAL STUDENT MEMBERSHIP

Dr. M. Beckett Howorth, Jr.: WHEREAS, The Mississippi State Medical Association proudly accepts its responsibilities to medical education and to the medical students who are our next professional generation, and

WHEREAS, The AMA House of Delegates has requested each state medical association to provide a degree of membership for medical students, and

WHEREAS, The Board of Trustees of the association has approved this proposal, as has at least one component medical society of the association, the North Mississippi Medical Society, now, therefore, be it

Resolved, The Mississippi State Medical Association does establish a degree of membership for medical students which shall be dues-free, that said students shall be regularly enrolled in a medical school approved by AMA which is located in Mississippi, that application for membership shall be submitted to the association, that a special component shall be provisionally created and provisionally chartered by the Board of Trustees as regards the University of Mississippi School of Medicine and such component shall be designated the University Medical Society whose members may conduct their own society affairs under the Constitution and By-Laws, including the election of their own officers and voting delegates to the Mississippi State Medical Association, and that the Board of Trustees shall implement this resolution, taking such additional actions as are deemed necessary to fulfill its purpose, and be it further

Resolved, That this resolution be implemented without amendment to the By-Laws at this time, pending amendment of the AMA By-Laws as to the student membership and that criteria for membership prescribed in MSMA By-Laws relating to doctors of medicine may be waived to

HOUSE OF DELEGATES / Continued

the extent necessary to accomplish these purposes for student membership by the Board of Trustees.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND BOARD OF TRUSTEES

This resolution proposes that a degree of membership be created for medical students in Mississippi and provides for their participation in the work and affairs of our association. Your Reference Committee feels that this resolution and the proposal have great merit, and we approve the establishment of a degree of membership for medical students in accordance with the terms of the resolution.

We recommend that only those students in the last two years of training be eligible for membership. We point out that this would permit those in the first and second years to participate in the Student American Medical Association chapter which has recently been reactivated at the University of Mississippi School of Medicine.

We, therefore, request the Board of Trustees to provide for provisional organization and provisional charter of the University Medical Society and for election to membership of those students who apply.

Dr. J. T. Davis of Corinth moved to amend the last sentence of the reference committee's report to insert the words "a degree of membership" immediately before the words "and for election to" and the motion was seconded by Dr. S. Jay McDuffie of Nettleton. The motion to amend was adopted, and the main motion was adopted as amended.

RESOLUTION NO. 9

Resolution No. 9 was withdrawn from consideration by the House of Delegates.

RESOLUTION NO. 10, ASSOCIATION FINANCIAL MANAGEMENT

Dr. J. T. Davis: WHEREAS, Matters relating to association finances and the budget have, for many years, been responsibilities of the Council on Budget and Finance, a three-member body, and

WHEREAS, The association, as has been true of virtually all state medical associations, has increased its programs of service, extended its activities, and experienced growth in financial operations, and

WHEREAS, It is desirable for the association to have the benefit of a broader base of financial management and monitoring than can now be

provided with a three-member body, now, therefore, be it

Resolved, That Section 7, Chapter IX, By-Laws of the association, be amended to provide for a five-member Council on Budget and Finance with terms so arranged that not more than two members are elected annually by the House of Delegates, and be it further

Resolved, That this amendment become operative at the 103rd Annual Session in 1971 so as to provide for orderly arrangement and succession in terms of members of the expanded council.

REPORT OF THE COUNCIL ON CONSTITUTION AND BY-LAWS

This resolution proposes an expansion of the membership of the Council on Budget and Finance to five members from the present three members, and it involves making a minor change in Section 7, Chapter IX of the By-Laws.

We approve this amendment and recommend that it be adopted now to become operative at the 103rd Annual Session in 1971 so as to provide for orderly arrangement and succession in terms of members of the expanded council.

The report of the council, acting as a reference committee, was adopted.

RESOLUTION NO. 11, EMERGENCY MEDICAL HELICOPTER PROJECT

Dr. Howard A. Nelson: WHEREAS, The State of Mississippi, through Mississippi State University and other cooperating organizations, has conducted a demonstration project on utilization of helicopters for emergency medical transportation with bases at Greenwood, Jackson, and Hattiesburg, and

WHEREAS, The medical profession, through experience in the Korean War and the War in Vietnam, recognizes the helicopter as means of medical air evacuation and emergency service transportation without parallel in the saving of human life in rapid movement of accident victims and other emergency patients to centers of care, and

WHEREAS, The demonstration grant under which the project is being conducted will soon expire, and

WHEREAS, The project should be continued in the interest of care of accident and emergency patients and eventually established as a service for Mississippians, now, therefore, be it

Resolved, That the Mississippi State Medical Association applauds the emergency helicopter service as vital to the public health and urges its continuation by the State of Mississippi offering support and endorsement of the service.

REPORT OF THE REFERENCE COMMITTEE
ON MEDICAL PRACTICES

This resolution applauds the emergency helicopter demonstration project and recommends continuation of service by the State of Mississippi. We approve the resolution and recommend its adoption.

The report of the reference committee was adopted.

RESOLUTION NO. 12, INCENTIVE
TO PRACTICE IN RURAL AREAS

Dr. Guy T. Vise: WHEREAS, There is a shortage of physicians in Mississippi where the ratio is approximately half the physicians to population that it is nationally, and

WHEREAS, The need for physicians is especially acute in rural areas where physician to population ratio is even less than the low state average, and

WHEREAS, Medical organization, in its continuing effort to present positive programs for assured care delivery to the American people, earnestly seeks solutions to these perplexing problems, now, therefore, be it

Resolved, That the Mississippi State Medical Association recommends that appropriate tax incentives be provided to physicians who elect to practice in rural areas of Mississippi and of other states and further recommends that the Internal Revenue Code of 1954 be accordingly amended to provide this incentive.

REPORT OF THE REFERENCE COMMITTEE
ON MISCELLANEOUS BUSINESS

This resolution recognizes the shortage of physicians in Mississippi and seeks certain amendments to the Internal Revenue Code of 1954 to provide tax incentives for physicians to practice in rural areas of the United States. We approve the resolution and recommend its adoption.

The report of the reference committee was adopted.

RESOLUTION NO. 13, SUPPLY
OF PHYSICIANS

Dr. Paul B. Brumby: WHEREAS, The Mississippi State Medical Association recognizes that there is a shortage of physicians in our state, and

WHEREAS, The association earnestly seeks solutions to this urgent problem in the interest of delivering medical care to all Mississippians, and

WHEREAS, The University of Mississippi School of Medicine is the state's primary source of physicians, now, therefore, be it

Resolved, That the Mississippi State Medical Association calls on the State of Mississippi to do those things necessary in support of the Universi-

ty of Mississippi School of Medicine to increase the size of classes of medical students to the end that the state may enjoy the benefits of larger graduating classes, and be it further

Resolved, That the association does endorse such action and does offer its support in partnership with the state in achieving this worthy end.

REPORT OF THE REFERENCE COMMITTEE
ON MISCELLANEOUS BUSINESS

This resolution calls on the State of Mississippi to do those things necessary in support of the University of Mississippi School of Medicine to increase the size of classes of medical students to the end that the State may enjoy the benefits of larger graduating classes.

Your reference committee concurs with the proponent of the resolution in that the University of Mississippi School of Medicine is our primary source of physicians. We, therefore, offer our endorsement and support of any such programs which will assist the University in enlarging classes and the supply of physicians in our State and call on all physicians to give of their best efforts in this connection.

Dr. Ralph L. Brock of McComb moved to amend the report of the reference committee by deleting the period in the last sentence and adding the words "and be referred to the Council on Legislation for implementation." Dr. H. C. Ricks, Sr., seconded the motion to amend which was adopted. The main motion was adopted as amended.

RESOLUTION NO. 14, LOCATION
OF TRAINING FACILITY

Dr. James Grant Thompson: WHEREAS, The Board of Trustees of the Mental Institutions of the State of Mississippi has seriously and carefully considered the location of a training institution for the training of mentally retarded individuals and

WHEREAS, Representatives from three localities adequately presented to this Board their reasons why this facility should be located in their areas, and

WHEREAS, The Board of Trustees of the Mental Institutions of the State of Mississippi has decided that due to certain existing conditions the facility should be located at, in, or near Oxford, Mississippi, now, therefore, be it

Resolved, The Mississippi State Medical Association does urge the approval of the location of the training institution for the training of mentally retarded individuals to be in or near Oxford, Mississippi.

HOUSE OF DELEGATES / Continued

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

This resolution, emanating from the Board of Trustees of Mental Institutions of the State of Mississippi, refers to location of a training facility which is being considered and planned for North Mississippi for the mentally retarded. The resolution recommends that the institution be located in or near Oxford, Mississippi.

We had informed discussion in this connection, and we concur with those who support the location of the institution in or near Oxford and recommend adoption of the resolution.

Dr. William E. Lotterhos, speaking as a member of the House, moved to amend the report of the reference committee by deleting from the last sentence the words "concur with" and substituting therefor the words "have confidence in the judgment of" and the motion was seconded by Dr. J. T. Davis. The motion to amend was adopted, and the main motion was adopted as amended.

RESOLUTION NO. 15. CONDUCT OF THE HOUSE OF DELEGATES

Dr. Howard A. Nelson: WHEREAS, Section 4, Chapter V, By-Laws of the Association provides that meetings of the House of Delegates shall be conducted according to *Robert's Rules of Order, Newly Revised*, and

WHEREAS, The House of Delegates of the American Medical Association has adopted the *Sturgis Standard Code of Parliamentary Procedure*, and

WHEREAS, It is desirable for the House of Delegates of this Association to seek a parallel parliamentary guide now, therefore be it

Resolved, That Section 4, Chapter V of the By-Laws be amended to delete *Robert's Rules of Order, Newly Revised* and substitute therefor *Sturgis Standard Code of Parliamentary Procedure*.

Resolution No. 15, having been introduced on the final day of the annual session and seeking an amendment to the By-Laws, was received and placed on the table for one year under the rules of the House of Delegates.

OFFICIAL ATTENDANCE

The official attendance was announced as being 917 to include 473 physicians, 210 members of the Woman's Auxiliary, 114 exhibitors, 106 guests and others, and 14 staff.

REPORT OF THE REFERENCE COMMITTEE ON RULES AND ORDER OF BUSINESS

Conduct of Business. Your reference committee commends the Speaker and Vice Speaker for the outstanding manner in which they have conducted business before this House of Delegates. We believe that all members will wish to associate themselves in this connection and in an expression of appreciation to these officers. We approve the remarks of the Speaker.

Resolution. Your reference committee desires to offer the following resolution for consideration by the House of Delegates:

WHEREAS, The 102nd Annual Session of the Mississippi State Medical Association has been conducted in Biloxi, Mississippi, during the period May 11-14, 1970, and

WHEREAS, The annual session has been most profitable and enjoyable for all who have been in attendance, now, therefore, be it

Resolved, That expressions of deep appreciation are made to the officers, Trustees, and Council on Scientific Assembly for the stimulating and worthwhile scientific program; to the management of the Buena Vista and other participating hotels; to the press, radio, and television for coverage of our activities; to the gracious ladies of the Auxiliary who always contribute so substantially to our meetings; to the technical exhibitors and their professional service representatives; to our scientific exhibitors; to our distinguished guests; and to all who shared in the responsibilities of planning, organizing, and conducting this great annual session.

Your reference committee recommends adoption of this resolution.

The report of the reference committee was adopted.

REPORT OF THE ELECTION OF OFFICERS

President-elect: Arthur E. Brown, Columbus.

Vice Presidents: John R. Lovelace, Batesville; J. Dan Mitchell, Jackson; Eldon L. Bolton, Biloxi.

Secretary-Treasurer: Raymond S. Martin, Jr., Jackson (1973).

Speaker: William E. Lotterhos, Jackson (1973).

Vice Speaker: John B. Howell, Jr., Canton (1973).

Associate Editor: George H. Martin, Vicksburg (1972).

Delegate to AMA: C. D. Taylor, Jr., Pass Christian (1971-72).

Alternate Delegate to AMA: Stanley A. Hill, Corinth (1971-72).

Board of Trustees: Lyne S. Gamble, Greenville, District 1; James O. Gilmore, Oxford, District 2; J. T. Davis, Corinth, District 3 (1973).
 Council on Budget and Finance: Daniel L. Hollis, Biloxi (1973).
 Council on Constitution and By-Laws: Arthur E. Brown, Columbus (1973).
 Judicial Council: William E. Weems, Laurel, District 7; Wendall B. Holmes, McComb, District 8; James T. Thompson, Moss Point, District 9 (1973).
 Council on Legislation: Arthur A. Derrick, Jr., Durant, District 4; John G. Caden, Jr., Jackson, District 5; Frank H. Tucker, Jr., Meridian, District 6 (1973).
 Council on Medical Education: Charles N. Floyd, Gulfport (1973).
 Council on Medical Service: Charles R. Jenkins, Laurel, District 7; Jack A. Atkinson, Brookhaven, District 8; Bedford F. Floyd, Jr., Gulfport, District 9 (1973).

CONSTITUTION AND BY-LAWS

At the close of business, an amendment to Section 4, Chapter V, of the By-Laws, as proposed in Resolution No. 15, was lying on the table, pending action at the 103rd Annual Session.

CLOSING CEREMONIES

There being no further business, the Speaker returned the gavel to President Royals. The Oath of Office was administered to Dr. Paul B. Brumby, the President-elect, by Dr. Mal S. Riddell, Jr., Chairman of the Board of Trustees, after which Dr. Brumby addressed the House of Delegates.

Dr. James Grant Thompson of Jackson presented the Thompson Memorial Past President's Pin to Dr. Royals.

The House of Delegates was adjourned *sine die* at 4:28 o'clock in the afternoon, May 14, 1970.

PRN

An invitation to dinner was sent to the town's new doctor. In reply, the hostess received an absolutely illegible letter. "I'll have to know if he accepts or not," she said.

"Why don't you take it to the druggist?" her husband suggested. "They can always read doctors' notes no matter how badly they're written."

His wife went to the drug store and handed her druggist the slip of paper. He looked at it, went into the dispensary and returned a few minutes later with a bottle of pills. "Here you are, Ma'am," he said. "That'll be \$2.75."

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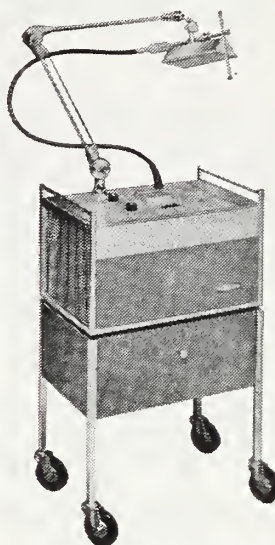
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Index to Advertisers

Arch Laboratories	475	Lederle Laboratories	4, 6
Breon Laboratories	6	Leonard Wright Sanatorium	14
Bristol Labs	16, 17	Eli Lilly and Company	Front cover, 18
Burroughs-Wellcome	436D	MPAC, AMPAC	426
Campbell Soup Company	436A	National Drug Company	444A, 444B, 464A, 464B
Carlton Corporation	12	Pharmaceutical Manufacturers Association	474
Dow Chemical	440A	William P. Poythress and Co., Inc.	440B
Eaton Laboratories	11	Roche Laboratories	Fourth cover
Flint Laboratories	7	Schering Corporation	14A, 14B
Health Screening Centers, Inc.	15	G. D. Searle Co.	436B, 436C
Hill Crest Hospital	10	Smith, Kline and French	second cover
Hynson, Westcott and Dunning, Inc.	3	Thomas Yates and Company	third cover
Kay Surgical, Inc.	475		

IN CONCLUSION

The half life of medical knowledge is only eight years, and this is emphasized in a recent paper by Dr. Robin W. Bell-Irving of Vancouver. Writing on "physician obsolescence," he says that six reasons get us out-of-date: Ourselves and "unlearning;" misunderstanding about practice patterns; town-gown controversy; the money government axis; hospitals; and relationship to the health care team. Bell-Irving formula is postgraduate study and "personalized" practice.

A six-county family planning program has been funded in central Mississippi by OEO. Thrust of project is medical guidance for female participants in Attala, Carroll, Choctaw, Holmes, Montgomery, and Webster counties. Features of program include physicians' service, counseling, supplies, and where necessary, transportation to clinic. Project is aimed at serving low income families. Initial grant is \$33,000 on application of \$153,000 for entire program.

Family practitioners are earning more since the advent of Medicare and Medicaid in 1966, but they are also working longer hours. This is the finding of the American Academy of General Practice in a study involving 1,000 general practitioners. Only those physicians working 66 to 70 hours a week managed to improve income by 26 per cent, while 41-to-45 hour per week M.D.'s enjoyed less than 6 per cent gain. Study counters accusation of zooming incomes.

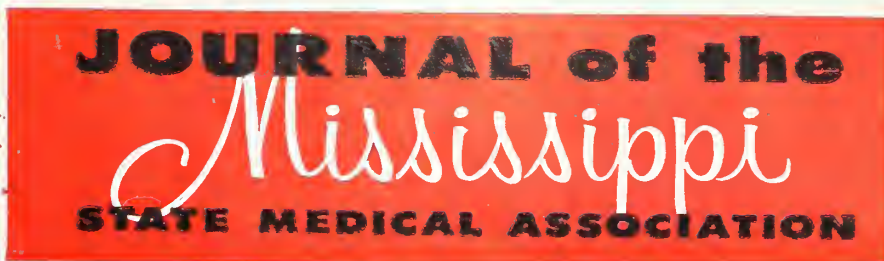
Special telephone equipment for the handicapped can be an important rehabilitation aid. In a demonstration project involving 300 disabled patients, N.Y. Medical Center and American Tel and Tel furnished special phones, each tailored to individual patient need, to the seriously impaired patients. Follow up investigation showed how easy-to-use phones improved morale and even helped patients to engage in useful, productive activities.

Mutagenic properties of LSD have apparently been demonstrated by investigators at George Washington University. Sample was 127 pregnancies in 112 women who ingested 100 micrograms of drug before or during pregnancy. Of these, there were 65 abortions and 62 term births. Fifty-three abortions were therapeutic with some related to LSD. Among the 62 infants, 56 were normal except for one premature who died, and six had congenital defects attributed to LSD use.

Volume XI

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CONTENTS

ORIGINAL PAPERS

- Acute Alcoholic
Hepatitis—A Review
of 32 Cases **477** WILLIAM M. MCKELL,
JR., M.D., and LIDIO
O. MORA, M.D.
- Twenty-Seven Months of
Chemoprophylaxis for
Prevention of Tuberculosis
in Mississippi **485** LEE R. REID, M.D.
- Acute Bacterial Infections
in the Newborn **493** DENNIS I. WRIGHT, M.D.,
and ALFRED W. BRANN,
JR., M.D.

SPECIAL ARTICLES

- Radiologic Seminar XCIX:
Endometriosis: An
Unusual Cause of
Colon Obstruction **502** WALTER T. COLBERT,
M.D.
- Fifty-One Years in the
Art: A Family
Physician Remembers **504** Profile of Service

EDITORIALS

- The College and Cancer:
Saga of Enlightened
Leadership **507** Reasons for Registries
- Rx for Inflation and
Drug Costs **509** Bargains in Health
- Why Not More Dental
Care Insurance? **510** Just 3 out of 100
- Ingratitude and Calumny
and Sen. Hughes **511** Take AMA on!
- Button Power, Teenage
Style **512** Don't Meth Around

THIS MONTH

- The President Speaking **506** 'Dilemma in Blue'
Medical Organization **519** New Membership Service

Copyright 1970, Mississippi State Medical Association

PMA Produces New Booklet

The quest of pharmaceutical industry scientists for the medicines of tomorrow is described in a new illustrated booklet published by the Pharmaceutical Manufacturers Association.

Entitled *MOLECULES, MEDICINES AND YOU*, the booklet depicts in lay language the unending search for new and improved products along such frontier areas as molecular biology and tells what scientists know—and do not know—about the ways medicines work within the body.

The booklet first describes the cell and the approach scientists are taking to find out how specific drugs link to cell molecules, one reason being to eliminate or minimize side effects. Another section relates how today's researchers study molecular disturbances in the nervous system and seek specific medicines to restore its intricate balance and the patient's mental health.

A third section deals with malfunctions of the heart or blood vessels, noting that scientists are delving into the "exciting field of microvessels . . . on the frontier where coronary heart disease begins." Viruses are another subject, with the gains through immunization mentioned, along

with the field of host resistance as an approach to the control of virus infections.

Still another section describes enzymes, and particularly the ribonuclease enzyme, "as a model from which we may learn how to design medicines to combat disease at the molecular level."

In briefly relating the steps by which a new product proceeds from discovery to marketing, the booklet underlines the importance of industry-government cooperation in producing safe and effective medicines.

"There were 851 major new medicines developed from 1940 through 1969 and nearly two-thirds of these originated in the United States," the booklet says. "In the last three years, as an example, 50 totally new drugs and vaccines were added to the armament of the physician . . . and 48 of them emerged from pharmaceutical industry research."

The 16-page booklet has several full-color illustrations of the cell, the central and peripheral nervous system, normal and hypertensive blood vessels, and a laboratory model of the ribonuclease enzyme. A bibliography lists 22 books on the health sciences.

Single copies are available on request from the Public Relations Division, Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N. W., Washington, D. C. 20005.

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NEWSLETTER

September 1970

Doctor:

cal care foundations under the control of physicians are shaping
s the health care delivery system of the 1970's. Developed in
fornia, the foundation concept is moving east with recently-
iated organizations in Colorado and New Mexico. Iowa is also
ing up statewide foundation, and Florida and Georgia are now in
l planning stages.

Foundations are medical association-sponsored, nonprofit
entities standing between the provider and third parties.
Heart of system is peer review and physician control of
professional fee payment. California foundations adminis-
ter both Medicare and Medi-Cal (Medicaid).

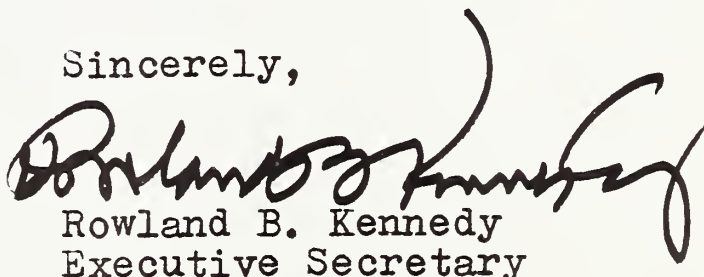
amates are out under new Food and Drug Administration order which
all use of artificial sweeteners in class. New edict comes after
l ruling on cyclamate-sweetened soft drinks and extends to fruits
vegetables. Food processors say that losses of inventories to be
royed will run into the millions. Under FDA order, there is no
ision for a hearing or appeal to stay the action.

ersity Medical Center has announced a new training program for
al hygienists. Course will be 21 months in duration, and first
s will consist of 20 trainees. Program is under UMC's Office of
ed Health Professions, and director is Dr. James R. Hatten, in-
ctor in surgery (dentistry). Funds for project were provided by
regular session of legislature, and project is supported by the
issippi Dental Association.

al Security Administration warns that misleading advertisements
being sent to Medicare beneficiaries in the Mississippi area.
ings promote supplemental insurance for sale by mail and tend to
impression that company is connected with SSA. One mailer uses
ndow envelope which closely resembles those used by government
ail benefit checks. Most carriers selling supplemental insurance
reputable and describe policies honestly.

bill introduced in U.S. Senate would provide \$4.5 million for
ly practice scholarships and residencies. Sponsored by five
blican senators, S. 4208 would offer 500 medical scholarships
200 residencies in first year. Awardees would agree to practice
reas with physician shortages or serve migratory farm workers.

Sincerely,



Rowland B. Kennedy
Executive Secretary

U.S.P./N.F. Merger Talks Begin

U.S.P./N.F. unification was discussed by officials of the United States Pharmacopeial Convention, Inc. and the American Pharmaceutical Association at A.Ph.A. headquarters in late summer.

Following the meeting, it was announced that an agreement had been reached to develop a master plan for a cooperative venture between the U.S.P. and N.F. Following development by the staffs of U.S.P. and N.F., the plan is to be considered by the A.Ph.A. Board of Trustees and the U.S.P.C. Board of Trustees.

Representing U.S.P. at the meeting were Dr. John H. Moyer, President; Dr. Paul L. McLain, Chairman of the Board of Trustees; Dr. William M. Heller, Executive Director; Dr. Thomas J. Macek, Director of Revision; and Joseph G. Valentino, J.D., Executive Associate. Representing A.Ph.A. at the meeting were Dr. William S. Apple, Executive Director; Grover C. Bowles, D.Sc., Treasurer and member of the Executive Committee; Dr. Edward G. Feldmann, Associate Executive Director for Scientific Affairs; and Dr. John V. Bergen, Director of the National Formulary.

A resolution was adopted at the April meeting of the U. S. Pharmacopeial Convention urging intensified efforts "to coordinate the activities and programs of the United States Pharmacopeia and the National Formulary, and to explore the advantages and feasibility of unification of these activities and programs with the objective of producing a single compendium of standards and tests for official drugs and dosage forms."

Wyeth Adds to Tubex Line

Wyeth Laboratories has added diphenhydramine hydrochloride, 50 mg. per ml., to its Tubex line of unit dose medications in prefilled sterile cartridge-needle units.

Diphenhydramine is supplied in packages of ten-1 ml. Tubex units.

With the addition of diphenhydramine hydrochloride, Wyeth's Tubex line of injectables now includes 37 drugs and 68 dosage variations—continuing to make it the broadest line of prefilled injectables available.

Also, Wyeth's unit dose medications include an extensive selection of oral solids, liquids and suppositories in Redipak® single-unit packages for hospitals.

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tients are accepted and departmentalized care is provided according to sex and the degree of illness.

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HOSPITAL**
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DATELINE


day Weekend New York - The Norwegian Medical Association has
asures Workers released a study report of the two-day weekend
which, it seriously concludes, is too short.
ings say that pressures on Norwegians to get out of town Friday
rnoon, fight traffic, live it up until Sunday, and return ex-
ted leaves them unfit to begin normal workweek on Monday. Re-
suggests 32-hour week with three days off but doesn't say how
of the same with extra day would help dilemma.

Gets Clean Washington - The tempest in a shaker over pos-
of Health sible dangers of monosodium glutamate, popular
and widely used flavor enhancer in foods, is
. National Academy of Sciences and National Research Council
MSG clean bill of health after safety was questioned along with
amates. FDA still got in last word with statement that since
e is no nutritional value in MSG, it should not be in ingredients
baby foods.

poration Guides Chicago - Generalized criteria for profitability
Outlined of organizing a professional corporation by M.D.'s
have been drawn by practice management consultants.
a rule of thumb, there should be at least two physicians or more in
nership with individual earnings of \$35,000 per year before taxes.
tributions to retirement should be about \$7,000 annually over 20
s per professional shareholder. Marginal practice situations,
guides, should be surveyed before incorporating.

H Accredits 46 Jackson - Forty-six of Mississippi's 128 hospitals
te Hospitals are fully accredited by the Joint Commission on
Accreditation of Hospitals, according to new list
t released. For first time, there are no provisional or temporary
tifications, and most encouraging sign is that many smaller hos-
als have now qualified. JCAH also reports no accredited extended
e facilities in state and only one fully accredited nursing home.

pital Costs Chicago - The American Hospital Association says
w Major Rise hospital expenses increased 17.3 per cent in 1969
over 1968 and upsurge shows no sign of abating.
patient day costs rose to national average of \$70 from \$61 year
ore. Personnel continues to be major cost factor with almost \$10
lion payroll in nation's 6,000 community hospitals. Typical ratio
280 hospital employees per 100 patients, up from 272 in 1968. To-
institutional employment is now 2.4 million in 7,150 public and
vate hospitals.



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INDICATIONS: SYNTHROID (sodium levothyroxine) INJECTION is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. It is indicated in myxedemataus coma and other thyroid dysfunctions where rapid replacement of the hormone is required. When a patient does not respond to oral therapy, SYNTHROID (sodium levothyroxine) INJECTION may be administered intravenously.

PRECAUTIONS: As with other thyroid preparations, overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, insomnia and continued weight loss. These effects may become apparent in from 4 days to three weeks. Therefore, patients should be kept under close observation. Medication, in such cases, should be stopped for 2 to 6 days, then resumed at a lower level. In patients with diabetes mellitus, look for possible changes in metabolic activity which may affect insulin or other antidiabetic drug dosage requirements.

CONTRAINDICATIONS: Thyrotoxicosis, acute myocardial infarction.

SIDE EFFECTS: Side effects are secondary to increased rates of body metabolism: sweating, heart palpitations with or without pain, leg cramps, weight loss, diarrhea, vomiting and nervousness. Myxedemataus patients with heart disease have died from abrupt increases in dosage of thyroid drugs. In most cases, a reduction in dosage followed by a more gradual adjustment upward will indicate the patient's dosage requirements without the appearance of side effects.

DOSAGE AND ADMINISTRATION: In myxedemataus stupor or coma, with no evidence of severe heart disease, 200 to 400 mcg. of SYNTHROID (sodium levothyroxine) INJECTION may be administered intravenously utilizing a solution containing 100 mcg. per ml. Detectable effects are usually observed by the sixth hour after injection and are fully appreciated the following day. A repeat injection of 100 to 200 mcg. may be given on the second day if significant improvement has not occurred. The intravenous use of sodium levothyroxine in myxedemataus coma is advantageous because it produces a predictable increase in the concentration of protein-bound iodine, eliminates the need for multiple doses until oral therapy is reinstated, circumvents the uncertainty of oral absorption, and avoids the risk of pulmonary aspiration.

SUPPLIED: SYNTHROID (sodium levothyroxine) INJECTION is supplied in 10 ml. vials containing 500 mcg. of lyophilized active ingredient and 10 mg. of Mannitol, N.F.; a 5 ml. vial containing Sodium Chloride Injection, U.S.P. is provided as diluent.

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Military Surgeons Hold 77th Annual Meeting

Emphasizing the theme "Controversies in Medicine," medical officers of the three military services will convene with physicians of the Public Health Service and the Veterans Administration for the 77th Annual Meeting of the Association of Military Surgeons of the United States, to be held at the Washington Hilton Hotel Nov. 29-Dec. 2, V.Adm. George M. Davis, MC, USN, the Surgeon General of the Navy and President of the Association, has announced.

Medicine's top man in the Nixon Administration, Dr. Roger O. Egeberg, the Assistant Secretary for Health, Education and Welfare, will deliver the keynote address on Monday morning, Nov. 30.

As currently planned, the scientific program, under the direction of R.Adm. George H. Reifenshtein, MC, USNR, will begin with a discussion on "Controversies of Management: Inflammatory Bowel Disease," with W. M. Lukash, MC, USN as Chairman, assisted by Lt.C. W. Boyce, MC, USA as Co-Chairman.

Other topics of clinical medical interest will include panel discussions centering on "Controversies in Management of Neurosurgical Problems, Intracranial Foreign Bodies . . .," moderated by Dr. C. Hunter Shelden, and "The Federal Physician's Attitude Toward Alcoholism," moderated by Capt. C. L. Waite, MC, USN. Capt. Waite's panel will also discuss "Computers and Medicine, a Perspective." These panels will be conducted on Dec. 1 and 2, respectively.

Following the Awards Program on Tuesday, an additional panel will take as its topic, "Problems Involved in Integrating Teaching and Research." The program will be chaired by Capt. J. William Cox, MC, USN.

Col. Nelson Irey, MC, USA Ret. will deliver the Sustaining Membership Lecture entitled, "Controversies of Diagnosis: Alleged Drug Reactions." R.Adm. F. P. Ballenger, MC, USN, General Chairman of the convention, will act as moderator.

The William C. Porter Lecture in Psychiatry will be given this year by Capt. Ransom Arthur, MC, USN. His paper is entitled, "Success Is Predictable." The Porter Lecture was established in 1958 by the Association, which has been called the Medical Society of the Federal Agencies, to honor William C. Porter, a pioneer in military psychiatry.

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Calphosan is a specially processed solution of calcium glycerophosphate and calcium lactate, containing 1% of each, in a physiological solution of sodium chloride. Each 10 ml. contains 50 mg. of calcium glycerophosphate, 50 mg. calcium lactate, with 0.25% phenol as preservative. Available in 10 ml. ampules in boxes of 10s and 100s; 60 ml. multiple-dose vials. Also available as Calphosan with B-12. U. S. Patent No. 2657172.

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Aerosol Sputum Unit Developed

A machine to help eliminate the hazard of contamination in the respiratory disease diagnostic areas of hospitals and clinics during the collection of aerosol induced sputum samples, has been developed by a Brigham Young University professor.

Dr. Marcus M. Jensen, who specializes in the environmental control of airborne microorganisms, has designed a mobile aerosol-sputum induction unit to be used in conjunction with the laboratory diagnosis of tuberculosis and other respiratory diseases.

Four prototype machines have been in use in Los Angeles hospitals during the past year. These have been successful enough to prompt further orders which are presently being executed by a Provo firm.

The top half of Dr. Jensen's unit has a fold-down shelf and two doors which open out to form a cubicle which is called the "hood." The patient is seated facing the hood which is made from stainless steel.

The output tube from a standard commercial nebulizer attaches to a nozzle on the outside of the hood, and a disposable tube carries the aerosol mist from the nozzle to the patient's mouth. The inhalation of the mist by the patient induces coughing which in turn carries microorganisms or cancer cells from the lungs in the sputum. The sputum samples are collected and analyzed by the laboratory. All airborne droplets generated by the induced coughing are drawn by a strong air-stream into the unit and trapped by an absolute filter.

The stainless steel hood can be easily decontaminated between patients by swabbing with an effective germicide. A storage compartment is provided for the nebulizer and for items such as sputum containers and disposable tubes. The complete unit can be readily moved from patient to patient if necessary.

Dr. Jensen developed the mobile aerosol-sputum induction unit in association with Dr. Seymour Froman of the Olive View Hospital, in Olive View, Calif. Several years ago, Dr. Froman convinced Dr. Jensen that there was a need to protect hospital personnel from contaminated air in diagnostic areas. Then, as Jensen produced the prototypes and refinements, Froman tested them under actual clinical conditions and suggested various improvements.

Brief Summary of Prescribing Information—9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokalemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®
hydroflumethiazide, 50 mg./reserpine,
0.125 mg. protoveratrine A, 0.2 mg.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201



ORIGINAL PAPERS

Acute Alcoholic Hepatitis— A Review of 32 Cases

WILLIAM M. McKELL, JR., M.D. and LIDIO O. MORA, M.D.
Jackson, Mississippi

THE CLINICALLY RECOGNIZABLE effects of heavy alcohol consumption on the liver range from completely reversible fatty infiltration to chronic irreversible cirrhosis with its varied complications. There is general agreement as to the existence of a definite syndrome in alcoholics characterized clinically by jaundice, leukocytosis, fever and abdominal pain, and histologically by cellular necrosis, parenchymal disorganization and a type of hyaline degeneration. It has been suggested that this entity is the link between the alcoholic fatty liver and nutritional cirrhosis.^{1, 2}

Acute alcoholic hepatitis is the most widely used label for this condition, however a multiplicity of names exist: "florid cirrhosis,"¹ "steatonecrosis-Mallory body type,"³ "progressive alcoholic cirrhosis,"⁴ "acute hepatic insufficiency of the chronic alcoholic"⁵ and "sclerosing hyaline necrosis of the liver."⁶ The variability of terms used to denote this syndrome indicate the different criteria used in selection of cases. Therefore the clinical picture and prognosis may differ markedly, depending on which author one reads.

From the Department of Medicine, Division of Gastroenterology, University of Mississippi School of Medicine.

Most studies have required the presence of "alcoholic hyaline," seen almost exclusively in livers of alcoholics, for inclusion into this syn-

Acute alcoholic hepatitis comprises the syndrome frequently seen in alcoholics characterized clinically by jaundice, leukocytosis, fever and abdominal pain, and histologically by cellular necrosis, parenchymal disorganization and a type of hyaline degeneration. The authors discuss 32 cases, defining significant prognostic features and management.

drome. Mallory⁷ in 1911 first described this histologic abnormality consisting of a coarse acidophilic meshwork of hyalinized cytoplasm, often perinuclear, which is seen frequently in alcoholic liver disease.

The present study was undertaken for the purpose of reviewing experience in Mississippi with this entity and in order to attempt to define any significant prognostic features which would be val-

uable to the clinician in his approach to the patient with acute alcoholic hepatitis.

Clinical Material: The material available for analysis consisted of clinical records and liver sections of 32 patients, from both the Veterans Administration Hospital and the University of Mississippi School of Medicine. In thirteen (40.6 per cent) of these, classified as Group A, both clinical and histologic criteria for acute alcoholic hepatitis (AAH) were met. In the great majority of instances they presented with fever, abdominal pain, and jaundice. Upon examination, they were found to have abdominal tenderness and hepatomegaly, with temperature elevations and leukocytosis also present. Liver biopsies revealed focal cellular necrosis, polymorphonuclear infiltration, Mallory bodies and parenchymal disorganization. These acute changes were superimposed on various degrees of fatty metamorphosis and cirrhosis.

In fourteen patients (43.7 per cent), classified as Group B, the classical clinical features were absent, only the histologic criteria were observed. In Group C, consisting of five patients (15.6 per cent), the clinical criteria alone were met, without the classic acute histologic findings being seen. The survival rate in the entire series was 62 per cent, 54 per cent of those in Group A surviving, 71 per cent of Group B and 60 per cent of Group C.

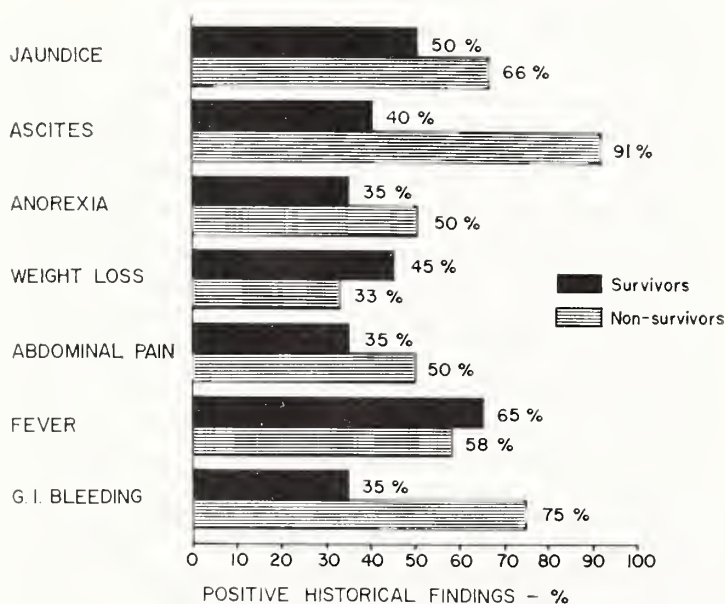


Figure 1

Methods: All sections studied were stained with hematoxylin and eosin. The specific findings noted and graded were: fat, presence and type of cir-

rhosis, inflammation, Mallory bodies, cholestasis, and necrosis. The degree of fatty infiltration and number of Mallory bodies were each graded as \pm to 4+. The presence of fat or Mallory bodies in less than five per cent of cells was categorized as \pm , in 5-25 per cent of the cells as 1+, in 25-50 per cent of the cells as 2+, in 50-75 per cent of the cells as 3+, and in greater than 75 per cent of the cells as 4+. Cirrhosis was classified as (a) "diffuse, Laennec type," or (b) "mixed cirrho-

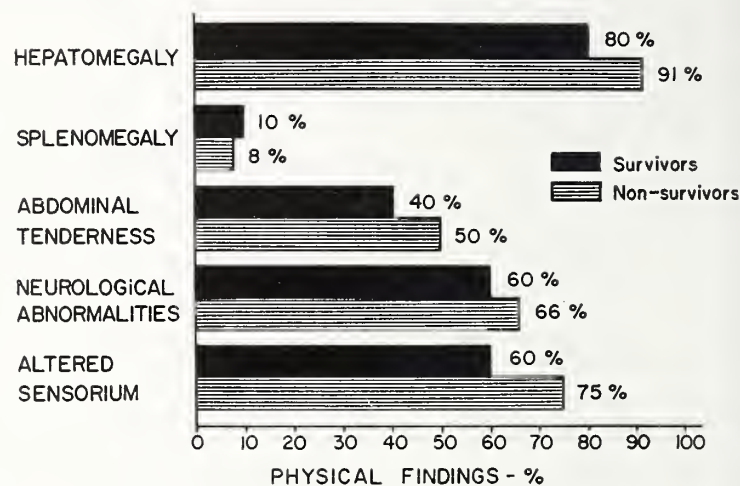


Figure 2

sis."⁸ Inflammation and cholestasis were each recorded as mild, moderate or marked, and necrosis and focal or diffuse.

Incidence: Ages of patients ranged from 27 to 68 with an average age of 48.15 years. The average age of those who expired was 51.08 years, of the survivors 46.40 years. A sex incidence in this series would not be valid since the majority (22 patients, or 68.7 per cent) of our patients were from the Veterans Administration Hospital. There were only three females included in our study. There were 24 white and eight black patients included.

Clinical History and Physical Status: This being a retrospective study, no reliable data on the adequacy of nutritional habits, years of significant alcohol intake, or interval between the last drink and time of admission to the hospital was available. It was usually inferred in the charts that the years of heavy drinking had been "many" or the patient was referred to as a "chronic alcoholic." The primary symptoms elicited from these patients upon their admission to the hospital are shown in Figure 1.

The most common presenting complaints in those patients who ultimately survived were fever (this was confirmed by documentation of an oral temperature greater than 99 degrees on day one or two of hospitalization in all cases) in 65 per cent, and jaundice (this was noted to be clinically

evident and chemically proven in all cases) in 50 per cent. Also elicited in the histories of sur-

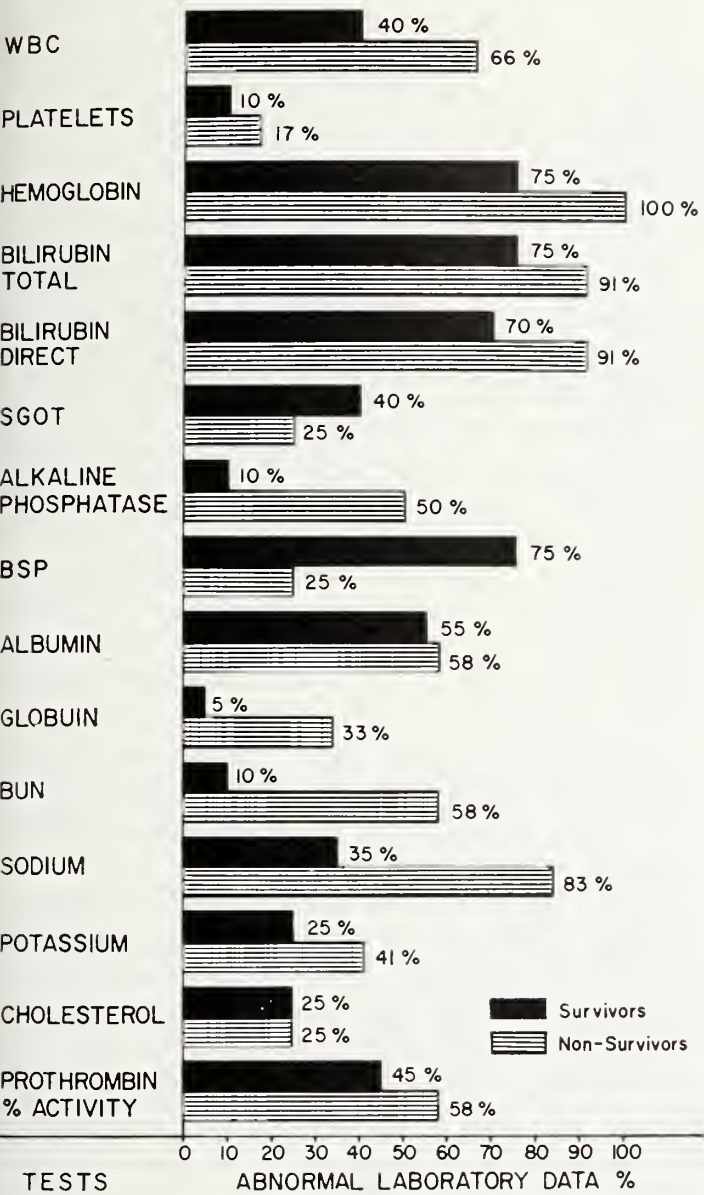


Figure 3

living patients were weight loss (45 per cent); abdominal swelling (found clinically to be accumulation of ascitic fluid) in 40 per cent; and in 35 per cent each, anorexia, abdominal pain and gastrointestinal bleeding (either hematemesis or melena). In those patients who died of this illness, or some complications thereof, during this admission, 91 per cent complained of abdominal swelling, 75 per cent of GI bleeding, 66 per cent of jaundice and 65 per cent of fever. As can be readily noted this latter group, from history alone, were sicker on admission than those who survived.

The physical abnormalities noted to be present on admission are shown in Figure 2. Despite the variance in the clinical histories between the survivors and non-survivors, it is noted that the physical findings were remarkably similar. It should be pointed out however that two items listed as historical findings were borne out on physical

examination and were significantly different between the two groups, these being ascites and evidence of gastrointestinal bleeding. Other than these and jaundice and fever (also listed as historical findings), the more frequent physical abnormalities were hepatomegaly, neurological abnormalities, and an altered sensorium.

Laboratory Values: The incidence of abnormal hematologic and biochemical values (including various tests of liver function) is shown in Figure 3. These refer to, in the vast majority, tests performed on admission or within 48 hours thereof. The most commonly noted abnormalities were anemia (found in 75 per cent of survivors and 100 per cent of non-survivors), hyperbilirubinemia of the direct-reacting fraction (seen in 75 per cent of survivors and 91 per cent of non-survivors) and abnormal retention of bromsulphalein (occurring, of those tested, in 94 per cent of survivors and 100 per cent of non-survivors)—this of course is readily explainable by the frequent accompanying hyperbilirubinemia. The anemia was relatively mild, the hemoglobin being between 10 and 13.8 gm in 53 per cent of cases. The leukocytosis seen in 40 per cent of the survivors and 66 per cent of non-survivors was usually mild (only seven patients or 22 per cent had a total WBC greater than 15,000/mm³) and was of a normal differential count. The SGOT levels were elevated in only 40 per cent and 25 per cent of survivors and non-survivors respectively and the alkaline phosphatase levels were abnormal in only 10 per cent of survivors and 50 per cent of non-survivors. This was somewhat surprising, for the biochemical abnormality in A.A.H. has been described as suggesting liver cell damage with some intrahepatic obstruction.⁹

There was hypoalbuminemia noted in roughly one-half of both groups, however hyperglobulinemia was noted in one third of the non-surviving patients, but only in five per cent of survivors. Prolonged prothrombin times were noted in approximately one-half cases in each group, hypokalemia in one-third, and elevations of serum cholesterol in one-fourth. There was a rather marked difference in the frequency of hyponatremia and of elevated BUN levels between the two groups, the serum sodium being less than 140 mEq/L in 35 per cent of survivors, but in 83 per cent of those who did not survive; azotemia was noted in 10 per cent and 58 per cent of survivors and non-survivors respectively.

Histologic Changes: The incidence of various histologic abnormalities is shown in Figure 4. Cirrhosis was seen in almost all cases, being absent in only 25 per cent of the cases who survived. The incidence of Laennec's and "mixed" cirrhosis

was equal in the non-survivors (50 per cent each), and the “mixed” type was seen twice as frequently in the survivors as in the Laennec type (50 per cent and 25 per cent respectively).

Fatty metamorphosis of some degree was seen in all patients, ranging from slight (\pm) to 3+ (occurring in 50-75 per cent of all cells). There was no significant difference in the amount of fat seen between the two groups. An inflammatory cell response consisting of polymorphonuclear leukocytes and round cells, as in the Laennec type leukocytes and round cells was seen to some degree in all sections. This was more marked in those who expired than in survivors. Mallory bodies were seen in all patients except one case who died eight days after admission. Their prevalence ranged from slight to 3+, with no significant difference between survivors and nonsurvivors.

TABLE 4
% INCIDENCE OF HISTOLOGIC FEATURES

Histologic Feature	Group	
	SURVIVORS	NON-SURVIVORS
Cirrhosis		
None	25	0
Laennec's (a)	25	50
Mixed (b)	50	50
Fat		
0	0	0
\pm	40	25
+	20	42
++	20	25
+++	20	8
++++	0	0
Inflammation		
0	0	0
Mild	20	9
Moderate	55	25
Marked	25	66
Mallory Bodies		
0	0	8
\pm	15	9
+	35	25
++	35	25
+++	15	25
++++	0	8
Cholestasis		
0	25	8
Mild	50	17
Moderate	20	33
Marked	5	42
Necrosis		
0	15	17
Focal	70	50
Diffuse	15	33

In one patient, a 46-year-old black female who died eleven days after admission, Mallory bodies were noted in 75-100 per cent of cells. Cholestasis was present in seven per cent of the survivors and 92 per cent of the non-survivors, with the bile casts noted in 75 per cent of the latter. Necrosis, either diffuse or focal, was seen in approximately 85 per cent of each group.

DISCUSSION

There is general agreement as to the existence of a definite syndrome in the alcoholic, usually acute and with rather significant morbidity and mortality, which is characterized clinically by fever and jaundice and histologically by a peculiar form of hepatic intracellular hyaline. The overall outlook for this entity ranges from quite good to almost invariably fatal, depending to a great extent on one's criteria for patient selection. Phillips and Davidson⁵ divided their group of fifty-six patients into two groups: one with “the lesion complex” (hyaline degeneration, cellular necrosis and parenchymal disorganization), and one group without “the lesion complex.” Of the 28 patients in Group I 18 died, running an average course of 11.7 days, whereas of the 26 patients in Group II, only five died.

Mallory bodies are usually thought indicative of a poor outcome. A group of 40 patients with fatty metamorphosis and/or portal cirrhosis, one-half with and one-half without Mallory bodies was studied.¹¹ The “Mallory body group” was found to have more hospitalizations, more hematemesis and ascites, less hepatosplenomegaly, less neurological and psychiatric findings, greater BSP retention (the remainder of liver function tests being essentially equal), more acute and chronic changes on liver biopsy and the appearance of more serious sequelae. Kern, Mikkelsen and Turrill¹¹ found that of 35 patients with biopsy-proven hyaline necrosis, 37 per cent died during that hospitalization (in contrast to only nine per cent of 228 patients in whom hyaline changes were not found). This poor prognosis extended to those patients in whom the hyaline necrosis was morphologically not typical and limited to only a few cells.

On the other end of the spectrum there have been reported five cases of “A.A.H. without jaundice,” only two of whom had Mallory's hyaline and none of whom died. Green et al¹² studied 50 cases, only two of whom died (one of staphylococcal pneumonia and one from sepsis) and it is their recommendation that the diagnosis be reserved for chronic alcoholics with a history of drinking up to the time of admission who present the clinical picture of acute hepatic insuf-

TABLE 5
CAUSE OF DEATH AND COMPLICATING DISEASES

<i>Patient</i>	<i>Age</i>	<i>Cause of Death</i>	<i>Interval in Days Between Admission and Death</i>
A.C.B.	56	Hepatic coma, GI bleeding, fresh myocardial infarction	2
W.H.T.	33	Hepatic coma, pancreatitis, pericarditis, renal failure	14
C.E.R.	68	Hepatic coma, pulmonary edema	1
L.J.R.	51	Hepatic coma	7
R.D.B.	57	Hepatic coma, pseudomonas septicemia	7
C.B.M.	43	Hepatic coma, G.I. bleeding	35
T.D.	50	Hepatic coma	1
H.P.	55	Hepatic coma	8
E.E.B.	59	Hepatic coma	28
H.M.	59	Hepatic coma, pneumonia	24
G.R.	50	Hepatic coma, pneumococcal pneumonia, perforated gastric ulcer with peritonitis, subarachnoid hemorrhage, portal vein thrombosis	2
E.A.	46	Hepatic coma	11

iciency and show fat, necrosis, inflammation, and Mallory bodies on liver sections.

In the present series of 32 patients, twenty of whom survived and 12 of whom expired, no significant difference was observed in the presence or absence of or prevalence of Mallory bodies in the histologic sections. In addition to the variability of classification of the syndrome of A.A.H. in the literature, there is also some variance as to what constitutes a Mallory body. The hyaline bodies are variously described as rounded or irregular hyaline masses, as being initially finely granular and later condensed and homogenous, as lumpy, as a coarse acidiphilic meshwork-often perinuclear, as ramified hyaline material or refractive hyaline bodies near the nucleus, or originally by Mallory, as a coarse hyaline meshwork.

Both the discrete rounded bodies and the hyaline degenerative changes were accepted as Mallory bodies for the purpose of this review. These changes were excluded from other "hyaline-appearing" artifacts such as free extracellular hyaline cells with uniformly-staining eosinophilic cytoplasm, and the presence of condensed eosinophilic cytoplasm seen in cells occupied primarily by fat. These changes of alcoholic hyaline are thought by most to represent swollen altered mitochondria.

The clinical picture consisted of, for the most part in our series, a known alcoholic, average age 48.15 years, presenting with fever, jaundice, ascites and gastrointestinal bleeding. The ascites and bleeding were more ominous signs, and as

would be expected, were less common in the patients who survived.

On physical examination, these patients, in addition to the fever, jaundice and ascites were found to have hepatomegaly, neuropsychiatric signs, and abdominal tenderness. These alterations do not differ from those found in alcoholics with chronic liver disease without superimposed A.A.H. The fever and abdominal tenderness (complaints of abdominal pain were not nearly so prominent in this series as are present in most reviews of this entity) have been emphasized in the literature as being characteristic of this entity. Though fever and abdominal tenderness when found in an alcoholic should certainly bring to mind the syndrome of A.A.H., the number of other conditions frequently responsible for such would prevent these findings from being considered characteristic. The point has been made¹² that because of the frequent presenting clinical picture of abdominal pain, nausea, vomiting, fever and leukocytosis these patients are often misdiagnosed as that of an acute surgical abdomen.

There have been various attempts in the literature to incriminate certain laboratory abnormalities as having characteristic or prognostic significance. Anemia, reticulocytosis, and leukocytosis have been reported in 60-80 per cent of cases.³ Anemia and leukocytosis, both quite mild, were prevalent in our patients, being slightly more frequent in the non-survivors. Reticulocyte counts were not obtained frequently enough for this to

be a valid consideration. We did not find, as did Phillips and Davidson,⁵ that the degree of leukocytosis paralleled the severity of illness.

The biochemical aspects of renal manifestations in liver disease include oliguria, hypotension, azotemia, hyponatremia, and hyperkalemia. Heccker and Sherlock¹³ have proposed that the degree of hyponatremia has prognostic value: that sodium levels of less than 130 are serious and that those of less than 120 are ominous.

In our series, the nonsurvivors had an incidence of azotemia six times that of the survivors, however only one of these had a blood area nitrogen greater than 60 mg. per cent. As with almost any disease or syndrome, one would certainly expect a higher mortality rate with an accompanying rise in the BUN, and A.A.H. is no different in that respect.

Also the incidence of hyponatremia in the present series was 83 per cent in the non-survivors as compared to 35 per cent in those who survived. There were eight patients who had or developed a serum sodium of 120 mEq/L or below, and none of these eight survived. In three of these patients the BUN was normal. The degree of hyponatremia, if the serum sodium was less than 130, was the most definite laboratory indicator of a poor outcome of any test we obtained, however this apparently is true of chronic alcoholic liver disease in general, regardless of whether A.A.H. is superimposed.

HYPERBILIRUBINEMIA

Hyperbilirubinemia was almost universal, in fact it has been listed as criteria for inclusion in the syndrome. Phillips and Davidson⁵ felt that the degree of elevation of the icterus index may be prognostic and it may be noted in our series that six out of the seven patients whose total serum bilirubin exceeded 15 mg. per cent died. The SGOT has been said, if elevated, to be the best laboratory test in predicting the presence of A.A.H.¹⁴ It is known, that though there is usually a greater degree of cellular necrosis in A.A.H. that the serum SGOT is only modestly elevated. It has been postulated that in hyaline necrosis, the cells "die slower."¹⁶ We were quite surprised at the rather low frequency (40 per cent in survivors and 25 per cent in non-survivors) of SGOT elevation in our series. In only four cases did we find the SGOT to be 200 units or greater, two of these died after one and two days hospitalization each and in one there was noted at autopsy a fresh myocardial infarction. We found as have others^{1, 5, 15} that an elevation of the alkaline

phosphatase was not the rule. In the series of Beckett et al⁹ however, the laboratory picture was described as that of "liver cell damage with some intrahepatic obstruction," implying that there is typically an elevation of both the SGOT and alkaline phosphatase. It is felt that the hypoalbuminemia and hyperglobulinemia, rather than being representative of this rather acute syndrome, simply reflect the degree and chronicity of the underlying liver disease. It is well established that these two protein abnormalities plus "beta-gamma" bridging in the protein electrophoresis strip are classical findings in hepatic cirrhosis.

PROTHROMBIN TIME

It had been our experience with other types of serious and occasionally terminal liver disease, including that due to alcohol abuse, that the prothrombin time was the most valuable tool in our laboratory (prior to the illness reaching the degree of severity at which significant hyponatremia develops) in predicting the immediate prognosis. Harinasuta et al³ found in their series of 175 patients with A.A.H. that the degree of hypoprothrombinemia was a useful prognostic tool, however Ugarte et al¹⁶ noted that the magnitude of alteration in the prothrombin time did not differ from that found in the general alcoholic population. We found prolongation of the prothrombin time in approximately one-half of the cases in both the survivors and non-survivors, making this neither an almost universal laboratory abnormality nor one of significant prognostic import.

So in addition to presenting with fever, jaundice, ascites, gastrointestinal bleeding, hepatomegaly with abdominal tenderness and some element of neuropsychiatric aberration, our "typical" middle-aged alcoholic will be found to have anemia, leukocytosis, and hyperbilirubinemia. If he be one who is ultimately to die during this hospitalization, he may also be found to have azotemia and hyponatremia and the above-mentioned hyperbilirubinemia to be in excess of 15 mg. per cent.

ADEQUATE MANAGEMENT

There is insufficient space to undertake a detailed discussion of management of A.A.H., however an adequate program must include the following: bed rest for what may be a rather prolonged period of time, until evidence of acute hepatocellular injury subsides; adequate diet and vitamin replacement. The diet should provide adequate calories, proteins, and fat to make the diet palatable. A regular diet in which the pa-

tient has some choice in menu selection and in which fried and greasy foods are kept to a minimum, serves the purpose. Folate and Vitamin B6 depletion are known to interfere with DNA and enzyme synthesis¹⁷ and should therefore be replaced in therapeutic amounts.

Salt restriction, usually 200-500 mg. sodium, may be indicated if fluid retention exists. The addition of potassium supplementation and Vitamin K may also be required. Hepatic coma, gastrointestinal bleeding, superimposed infections, and renal complications or combinations thereof must be managed accordingly and with great care, for the complicating presence of any one of these greatly worsens the prognosis in A.A.H. The causes of death in our twelve patients who expired are shown in Figure 5. As can be seen, hepatic coma was the sole cause of or a major contributing factor in the death of each of the twelve patients. Major infections were present in three, severe gastrointestinal hemorrhage in two, and renal failure in only one.

GLUCOCORTICOID USAGE

The use of glucocorticoids in the treatment of inflammatory liver disease remains controversial. Because of the mesenchymal cell proliferation¹⁸ and inflammatory response in A.A.H., adrenal steroids may well have a place in management here. Short-term courses of glucocorticoids may be of some benefit in reducing the anorexia and allowing correction of the existing protein and vitamin depletion, thereby promoting liver cell regeneration.

If one elects to use these drugs, he must certainly keep in mind the influence of steroids on the precipitation of bleeding peptic ulcers, the presence of complicating infections, and the false sense of security one might obtain from the more rapid decline in serum bilirubin and sense of well-being produced in the patient. The Copenhagen study group for liver disease,¹⁹ in investigating the use of corticosteroids on survival of patients with cirrhosis, came to the following preliminary conclusions:

- 1. Prednisone worsens the prognosis in patients with persistent ascites.
- 2. In female patients without ascites, prednisone treatment improves the prognosis.
- 3. In the remainder, primarily male alcoholics, the prognosis is probably not influenced by the use of prednisone.

Steroids were used in six of our patients, in four of the survivors and in two who died. In a retrospective view of such a small sample, certainly no conclusions can be drawn.

What is needed in the complete management

of these patients, especially those who progress to either chronic cirrhosis or fulminant hepatic failure and death, is the prevention of mesenchymal reaction and fibrosis, removal of toxic factors from the blood, hepatic support, and the addition of deficient factors to the circulation while the patient is essentially without a liver, thereby allowing time for hepatic regeneration. Certain rather involved programs which may well offer much in the future management of these patients are perfusion of the patient's blood through an isolated pig liver, cross circulation with human volunteers, exchange blood transfusion, plasmapheresis, and/or transplantation. At the present time, only plasmapheresis seems to be practical enough to be considered for use in the small private hospital.

SUMMARY

Thirty-two cases of acute alcoholic hepatitis were presented and the clinical, laboratory and histologic features were discussed. The mortality rate in the series was 38 per cent. The typical picture is that of a known alcoholic, average age 48.15 years, presenting the fever, jaundice, ascites and gastrointestinal bleeding, who upon examination is found to have hepatomegaly, neuropsychiatric signs and abdominal tenderness. Those who survived had a lesser incidence of azotemia, hyponatremia, marked hyperbilirubinemia (15 mg. per cent), hyperglobulinemia, and elevation of the alkaline phosphatase. Prognostically, there was noted no significant histologic features, specifically the authors did not find any real difference in the incidence of Mallory bodies between survivors and non-survivors.

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OUT OF THIS WORLD

The exobiologists whose field is the science of extraterrestrial life forms are divided as to the presence of intelligent beings on planets in the universe. Consider these two diametrically opposite views:

"There is nobody on Mars, and I am positive. It hasn't shown up on my teenage daughter's telephone bill."

"There is, without question, intelligent life on the moon. How do I know? Well, you don't see them spending \$24 billion to come down here to pick up rocks."

Twenty-Seven Months of Chemoprophylaxis for Prevention of Tuberculosis in Mississippi

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NO PRACTICAL METHOD is available at the present time that will directly prevent the first infection by the tuberculosis bacillus. This can only be attempted indirectly by keeping the uninfected individual from contact with active cases through reduction of the number of such cases available for contact. Therefore, complete tuberculosis control will have to be directed, at present, toward preventing non-communicable, primary cases of tuberculosis from converting into reactivated cases who transmit the disease. Another facet of the problem is to protect the uninfected person from reactivated cases among those who had been considered, erroneously, to be inactive.

Both of these problems can be handled, in a majority of instances, by the simple use of isoniazid, prophylactically. This drug, if taken in proper doses regularly for 12 months, will prevent the primary disease from progressing to the clinical stage (reactivation, secondary or adult tuberculosis) in almost all cases. It will also prevent reactivation of inactive disease in most instances.

Late in 1967, a committee from several organizations interested in tuberculosis published a report dealing with prevention of tuberculosis by the use of isoniazid.¹ In November, 1967, a state-wide program was instituted in Mississippi by the Tuberculosis Control Unit of the Division of Preventable Disease Control of the Mississippi State Board of Health. This was reported in July, 1968.² The present article is to report the results of this program from November, 1967, to February, 1970.

From the Tuberculosis Control Unit, Division of Preventable Disease Control, Mississippi State Board of Health, Jackson.

Briefly, our program of chemoprophylaxis is based upon research by the U.S.P.H.S.³ They found that isoniazid was successful in preventing

During 27 months between 1967 and 1970, more than 14,500 high risk patients in Mississippi were given isoniazid prophylactically for tuberculosis. The program was carried out by county health departments under the direction of the Tuberculosis Control Unit of the Division of Preventable Disease Control of the State Board of Health. Among these patients, no proven cases of tuberculosis developed in those who took isoniazid as directed. Thirty-two proven cases were found; 11 of these did not take the drug as directed and the other 21 were found to have developed the disease before the prophylactic therapy was initiated.

the occurrence of active, clinical tuberculosis among high risk groups in around 60 per cent of their cases. This extensive work showed that of 70,000 people forming the basis of the study, 698 developed active clinical tuberculosis. Out of the 698 proven cases, 502 were among those receiving placebo and only 196 were among those who received isoniazid. This clearly indicated its value. However, the drug failed to protect 196 of the patients. There is little doubt that a large percentage of the failures were among those who did not take the drug regularly nor for the prescribed length of time. The protection that was afforded

in such a high risk group amply justifies the procedure.

Chemoprophylaxis is carried out by giving isoniazid at the rate of 300 milligrams per day to adults and dosage of 5 milligrams per pound (10 milligram per kilo) to children, daily for one year.

When our program was launched in November, 1967, we were not able to put the information on punch cards for data processing. Because of this, the individuals reported here are included in only one group of reasons for prophylaxis (categories). These categories were listed in priority order and the highest one applicable was used. Our choices as to the priority order, by our own admission, are open to question. It was decided, however, that to prevent confusion, we would not change these priorities until we could process the data by machine. Most of the persons in the series could be included in two or more categories, but to try to do this without the aid of machine processing would have presented difficulties we were not prepared to handle. Beginning February 1, 1970, information has been put on punch cards and will be tabulated at regular intervals in the future.

From November 1, 1967, to January 31, 1970, 14,633 persons were started on chemoprophylaxis

in Mississippi. This is at the rate of 624.3 per 100,000 population, based on 1968 population estimate of 2,344,000 for the state.⁴

The categories included in our program (all those recommended as high risk individuals in the original report) are as follows:

1. Household contacts
2. Positive tuberculin below age of 20
3. Tuberculin converter
4. Ex-patient (diagnosed case) with inadequate or no previous chemotherapy with isoniazid.
5. X-Ray changes suggestive of tuberculosis with positive tuberculin.
6. Pregnancy
7. Special clinical situations with positive tuberculin such as corticosteroid treatment, gastrectomy, leukemia or Hodgkins' disease, unstable severe diabetes, or silicosis.
8. Measles or whooping cough with positive tuberculin.
9. Positive tuberculin, age 20 years or over with negative x-ray.

Category 9 required at least a 10 mm Mantoux reaction or Grade 3 Heaf; all others, 5 mm Mantoux or grade 2 Heaf.

In the categories listed above, only two need to be discussed. The other seven are self-explanatory.

TABLE 1

REASONS FOR DISCONTINUATION OF ISONIAZID

From 11/1/67 to 9/1/69, 3,532 persons terminated chemoprophylaxis. Of this number 2,193 completed 12 months of the drug. The following are the reasons for termination of the drug by the other 1,339 cases.

1. Uncooperative	720
2. Lost to follow-up	291
3. Drug reaction (real or imaginary)	90
a. Allergy (skin rash)	27
b. Nausea	27
c. Dizziness	16
d. Gains weight	5
e. "Kidney trouble"	5
f. "Nervousness"	3
g. "Pleurisy" pain	3
h. Rapid pulse	1
i. Hypertension	1
j. "Fever"	1
k. Epileptic seizures (?)	1
4. Discontinued on advice of private physician	88
5. Died of unrelated causes	61
6. Put on chemotherapy	57
7. On advice of Tuberculosis Control Unit	24
8. Religious convictions	4
9. Others	4

Household Contacts (Category No. 1)

Persons in household contact with an active case of tuberculosis are in the greatest danger of contracting the disease. There were two suggested methods for managing household contacts mentioned in the original publication.¹ First, that all members of the household be skin tested and the positive reactors be given isoniazid. The negative reactors were to be retested at three month intervals and the ones that converted to positive were placed on the drug. Second, offered as an alternative plan, was to place all members of the household on isoniazid, regardless of the result of the tuberculin test. This latter policy was adopted for two reasons. First, our limited nursing personnel would, in many instances, not be able to repeat skin tests at regular intervals. Second, it would have been difficult to explain to some of our family groups why some of them would have to take the drug and others would not. The lack of understanding, we feared, would contribute to lagging interest and poor cooperation. The low degree of toxicity of isoniazid allowed us to temper the ideal with the practical and give it to some who might not actually need it. Household contacts had 14 × 17 chest films at three month intervals dur-

TABLE 2
NEGATIVE SPUTUM INDIVIDUALS CHANGED FROM CHEMOPROPHYLAXIS
TO CHEMOTHERAPY

Case Number												Remarks
Age												
Category												
Tuberculin Test - H. Heaf												
Months on Chemoprophylaxis before Shifting to Chemotherapy												
Took Prophylactic Isoniazid Regularly												
Took Prophylactic Isoniazid Irregularly												
X-ray Cleared on Chemotherapy												
X-ray Did not Clear on Chemotherapy												
Atypical Organisms Present by X-ray before Chemoprophylaxis was Started												
Chemotherapy Reason for Sanatorium Started at												
1	6	2	H.2	6	Unk.	Unk.	X					Suspicious X-ray
3	84	1	H.3	7	X	X		X				Death Certificate (?)
11	18	1	H.3	7	Unk.	Unk.	X			X		Suspicious X-ray
12	24	9	H.4	6	X		X			X	X	Suspicious X-ray
13	28	9	H.3	-1	X		X			X	X	Suspicious X-ray
16	19	3	H.1	14		X	X			X		Suspicious X-ray
17	28	1	H.3	6		X	Unk.	Unk.		X		No recent X-ray (Hurricane)
18	7	1	?*	5		X	Unk.	Unk.		X		No recent X-ray (Hurricane)
20	28	1	M.12	8		X	X					Private M.D. Order (Need?)
22	16	1	H.4	2		X		X		X	X	Suspicious X-ray
24	69	1	H.2	-1	X		Unk.	Unk.	X			No recent X-ray (Hurricane)
25	51	5	M.15	3	X			X		X		Private M.D. Order (Need?)
26	63	5	H.2	-1	X		X		X	X		Suspicious X-ray
27	24	9	M.15	-1	X			X		X		Suspicious X-ray
28	14	2	H.4	1	X		X				X	Suspicious X-ray
30	9	1	Neg.	9	X		X			X	X	Suspicious X-ray
32	71	9	H.3	4	X		X			X		Suspicious X-ray
33	29	1	H.1	-1	Unk.	Unk.	X			X		Suspicious X-ray
40	5	2	H.4	1	X			X		X		Suspicious X-ray
45	4	2	H.3	-1	X			X		X		Suspicious X-ray
50	41	9	M.10	-1	X			X		X		Suspicious X-ray
52	1	1	H.1	7		X	X				X	Suspicious X-ray
53	46	9	H.3	-1	X		X		X	X	X	Suspicious X-ray
56	5	2	H.3	1	X			X		X		Suspicious X-ray
57	53	9	H.4	3	X			Neg.				Private M.D. Order (Need?)

* Record lost in Hurricane Camille

CHEMOPROPHYLAXIS / Reid

ing the period, if possible. If not, they were made at least at beginning and end of prophylaxis.

Positive Tuberculin (10 mm. reaction or grade III Heaf) Age 20 or Over With Negative X-Ray (Category No. 9)

This category deserves special mention as the one composed of people with a Mantoux of 10 mm or Heaf Grade 3 tuberculin test but with a negative 14×17 chest film. Minor calcific deposits in the hilar areas and a few flecks of calcium in the lung fields are usually disregarded and cases showing them are read as negative. This attitude is due to the prevalence of histoplasmosis in this area of the country. The first invasion of the body with *mycobacterium tuberculosis* may be on a very minor scale. The residuals of this infection may be so small as to be undetectable by x-ray. In these cases, the evidence of the disease will be represented only by a positive reaction to tuber-

culin. Still, these persons with "negative" chest films are in some danger of reactivation of the tiny lesion, resulting in a clinical and communicable disease.

Figure 1 shows the number of individuals treated by category based on 14,633 persons receiving chemoprophylaxis from November, 1967 to February, 1970.

As expected, category No. 9, those individuals with a 10 mm or over Mantoux or grade 3 or over Heaf tuberculin test but without x-ray evidence of disease, composed our largest group with 50.0 per cent. Household contacts, category No. 1, rated second with 27.0 per cent. Category No. 2, a positive tuberculin below the age of 20 years, rated third with 12.6 per cent.

Figure 2 shows distribution by age. This data was based on persons terminated between November 1, 1967, and September 1, 1969, numbering 3,532. It is noted that the groups including the teenagers made up 22.2 per cent of the total number. The middle-aged (41 to 60 years) group

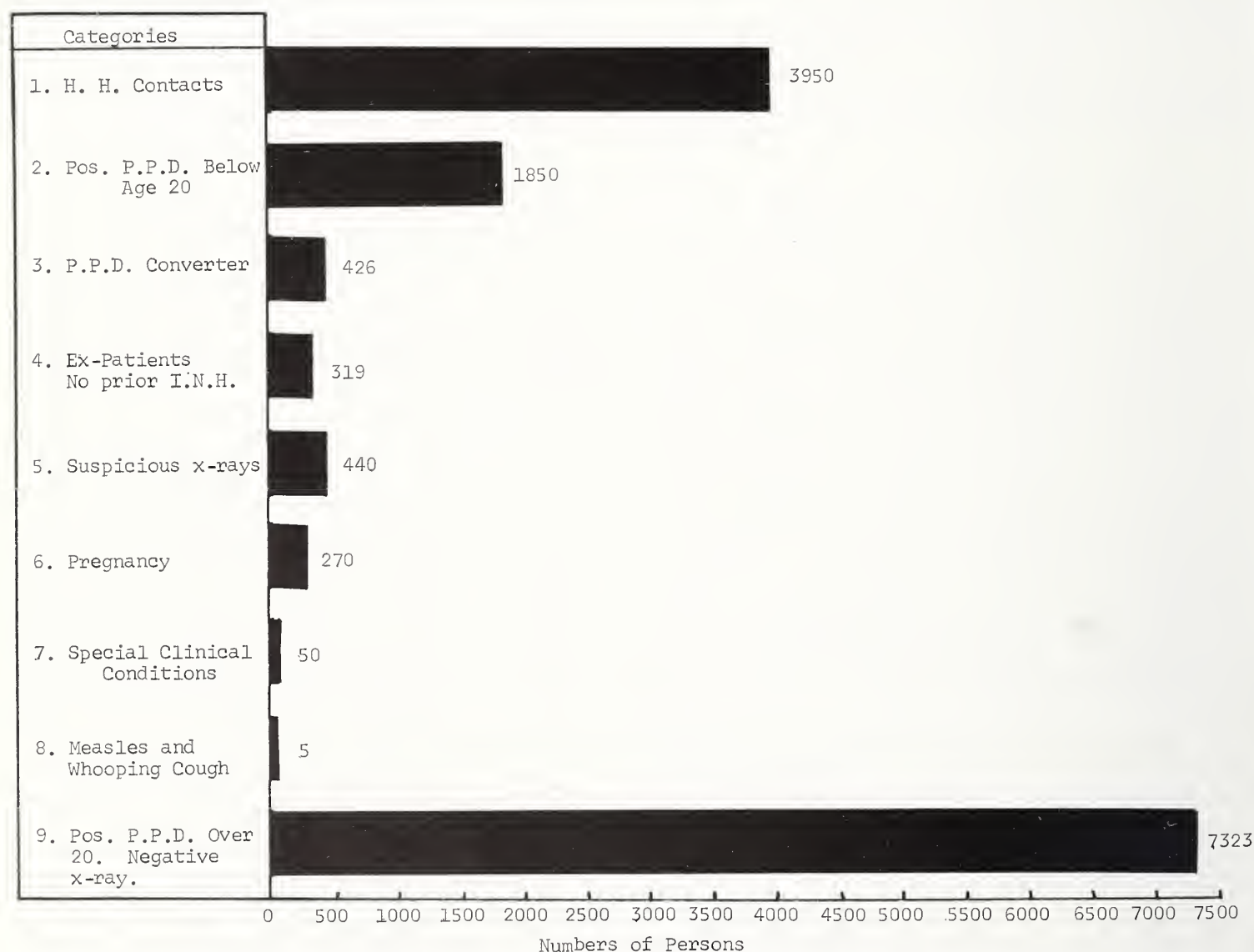


Figure 1. Indications for prophylaxis in 14,633 persons who received isoniazid between 11/1/67 and 2/1/70.

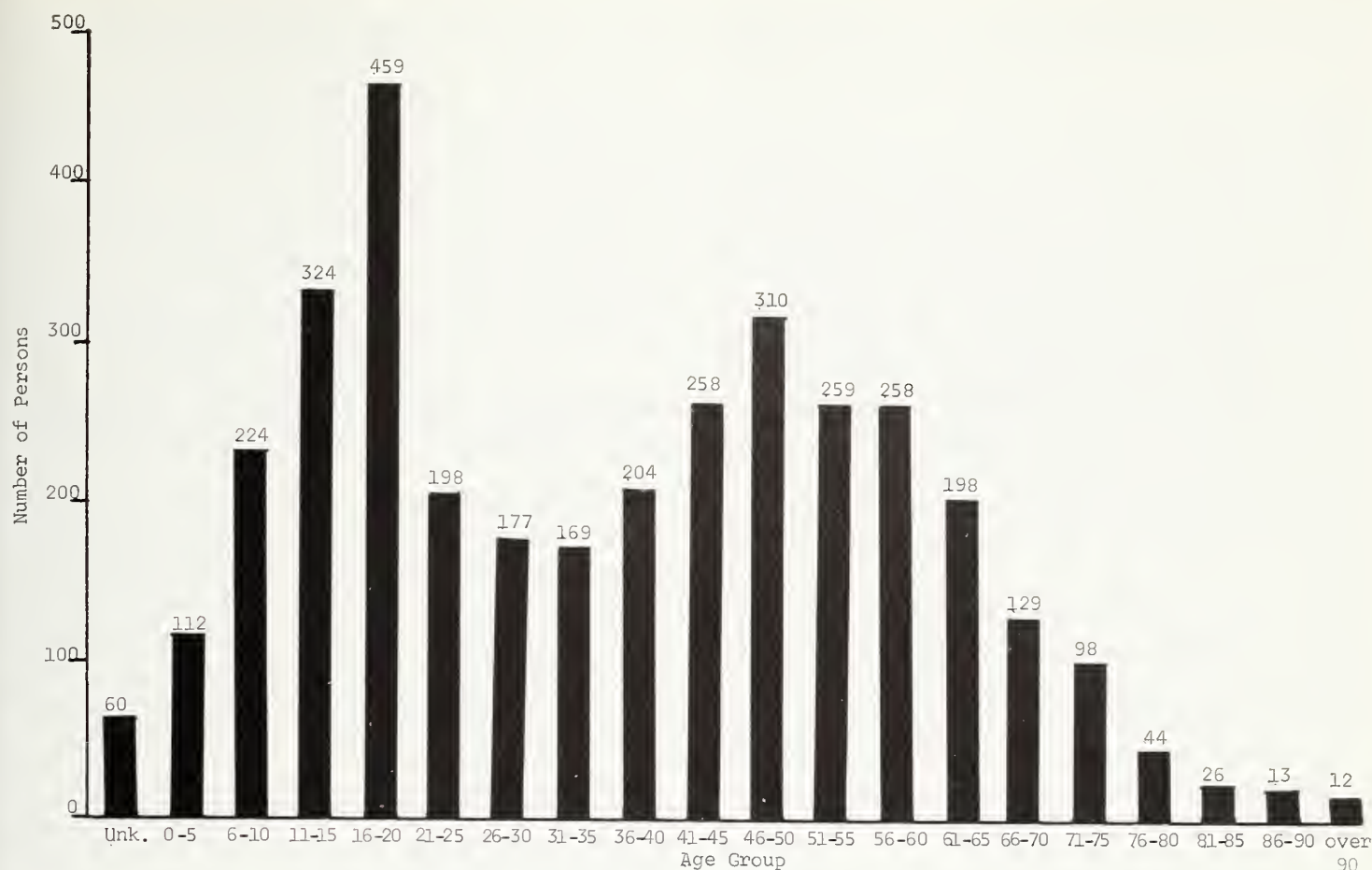


Figure 2. Ages of 3,532 persons whose chemoprophylaxis was terminated between 11/1/67 and 9/1/69.

showed 30.7 per cent.

Table 1 shows reasons for discontinuation of isoniazid. An analysis of the table shows that of 3,532 whose drug was terminated between November 1, 1967, and September 1, 1969, 2,193 or 62.1 per cent took the whole year of medication.

Reasons for Discontinuation of Isoniazid

1. Uncooperative:

The greatest handicap to success in chemoprophylaxis are those people who refuse to take the drug as directed. Of the 3,532 persons upon whom treatment had been terminated, 720 were uncooperative and took the drug issued to them only for a few days or weeks. Others took it so irregularly as to be of questionable benefit. This was not unexpected. Even in treatment of active disease, when the patient knows recovery itself depends upon taking the drug, it is difficult to get some patients to cooperate in the matter of self-administered treatment at home.

Figure 3 shows the length of time that the 3,532 cases who were terminated between November 1, 1967, and September 1, 1969, took the drug. This shows that the third and sixth month of the treatment year seem to be the crucial time for giving up treatment. This, however, prob-

ably reflects the fact that many cases were contacted at three month intervals when the next three months supply of the drug was to be issued and an x-ray made. At this time, the nurses learned that the patient was not taking the isoniazid. Two thousand one hundred ninety-three cases (62.1 per cent) endured to the end and finished a complete 12 months of continuous medication.

It will be noted that most of the patients who finished at least six months of isoniazid went on and took the drug for the whole year. The greatest number of "dropouts" were during the first 6 months.

2. Lost to Follow-up:

Two hundred and ninety-one people moved and could not be located for further treatment and followup.

3. Drug Reactions:

Ninety had drug reactions. Unfortunately, complaints listed in this group are largely unconfirmed. They were the reasons given to the nurses when individuals were confronted with the fact that they had not been in for a refill of the isoniazid order then due. A few skin rashes were confirmed by the nurses. Most of the other complaints were probably excuses given by those who could neither comprehend the necessity for nor the principles of prophylaxis.

4. Drug discontinued on advice of private physician:

In 88 instances the family physician objected to the use of the drug for various reasons, the most frequent being the result of his patient complaining to him of bizarre symptoms in order to escape taking the medication. Some physicians, not being familiar with the drug and knowing that it was being given prophylactically, simply felt it was probably not worthwhile. One case was hospitalized and a liver abnormality was found. Proof that it was due to the isoniazid was rather weak and sketchy, but the drug was not given to this patient after that, at this physician's request.

Not all the physicians concerned were contacted. We found that many people who had quit taking the drug, when questioned by the nurse, gave the family physician's objection as an excuse. In a substantial number of instances, when the private physician was contacted, it was found that the patient had misrepresented the facts.

5. Died of unrelated causes:

Sixty-one persons died while under prophylaxis, from unrelated causes.

6. Put on chemotherapy:

Between November 1, 1967, and February 1, 1969, 57 persons of the 14,633 taking chemoprophylaxis were put on chemotherapy for various reasons. The subject is discussed later in this report under "Individuals shifted from chemoprophylaxis to chemotherapy."

7. On advice of Tuberculosis Control Unit:

Twenty-four people were taken off chemoprophylaxis after being started on it by error; an illustration being some household contacts who were put on the drug when the index case was

found to have been diagnosed tuberculosis on basis of an error in laboratory reporting, etc.

8. Religious convictions:

Four persons started the drug, then gave it up because of religious reasons.

9. Others:

Three individuals with mental retardation were felt to be incapable of self-medication.

One case was "incapable of swallowing the medication because of mental condition."

Shifted From Chemoprophylaxis to Chemotherapy ("Failures")

The success of chemoprophylaxis can be judged by the number of people who develop tuberculosis while taking the drug or after completion of the course of chemoprophylaxis. We have followed most of our people for a relatively short period after completion of prophylaxis. Only three were found to require chemotherapy after one year of chemoprophylaxis. Two of these individuals, a mother and daughter, although they were on record as having taken INH for 12 months, when questioned admitted that they took the drug only when they "thought of it." Both had positive sputum. The daughter developed moderately advanced tuberculosis while under observation, was treated at Sanatorium with complete clearing of the infiltration. The mother, although the organism was reported as being found in her sputum, never showed any evidence of disease by x-ray but received a regular course of chemotherapy. Since the reliability of those two patients leaves much to be desired, it is likely that the sputum specimens were mixed up and both the positive ones were in reality from the daughter who unquestionably had the disease.

Another 19-year-old girl was put on chemotherapy one year and two months after chemoprophylaxis was started, but records show she definitely did not take much of the isoniazid and was not proven to have tuberculosis bacteriologically. She had a suspicious x-ray change and was put on chemotherapy to be on the safe side. All other cases reported were shifted from chemoprophylaxis to treatment while they were supposedly taking isoniazid.

No information was available in 1967 as to how long an individual had to be on prophylaxis before the appearance of active disease denoted a failure of chemoprophylaxis. When our program was set up, a decision was made that any individual who was receiving, or had received, isoniazid when circumstances dictated that multiple drug therapy was advisable would be tagged as a "failure." This was done regardless of how

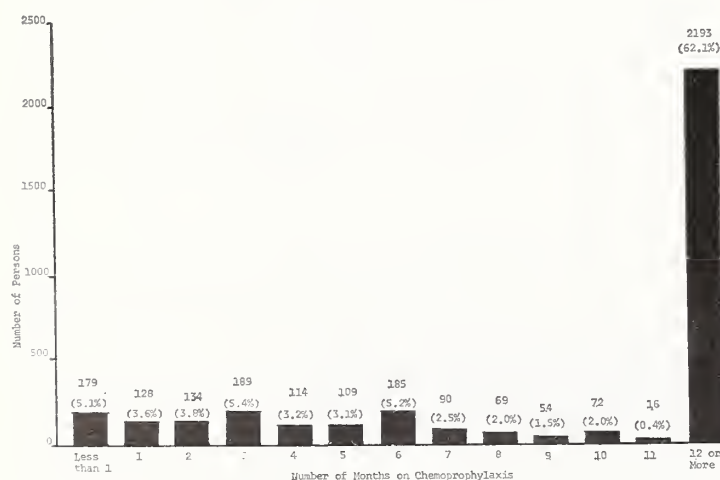


Figure 3. Months on chemoprophylaxis for 3,532 persons whose treatment was terminated between 11/1/67 and 9/1/69.

short a period of time the chemoprophylaxis medication had been administered.

Between November 1, 1967, and January 31, 1970, 57 people were shifted from prophylaxis to treatment. Of these, 32 were diagnosed on the basis of the culturing of *M. tuberculosis* from the

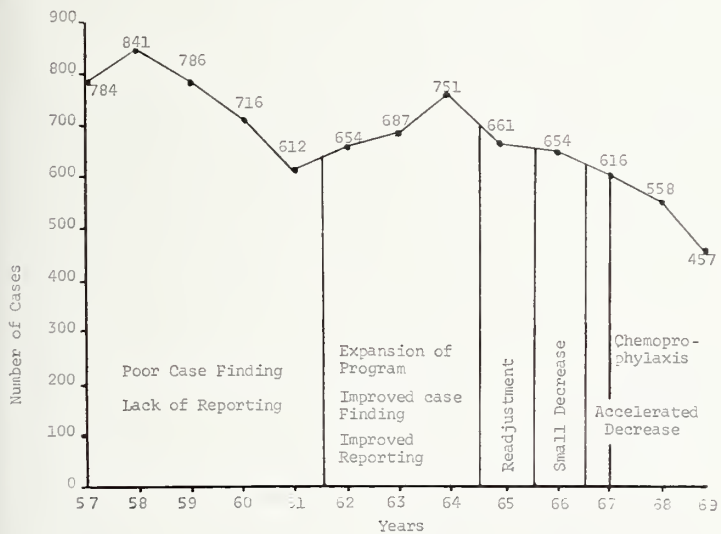


Figure 4. New active cases 1957-1969.

sputum or gastric washings. The other 25 were not confirmed bacteriologically. These latter will be considered first. Table No. 2 shows a breakdown of these individuals.

The following points should be brought out in explanation: Case No. 3, an 84-year-old woman, a household contact in a very unreliable family died in a local hospital after having taken the drug irregularly for seven months before death. The death certificate showed death due to "pleurisy with effusion, right (tuberculosis?)." This diagnosis is accepted with reservations. She received multiple drug therapy for a few days while in the hospital before death.

Three (Nos. 17, 18, and 24) were unable to have follow-up x-ray films due to disruption of services as the result of hurricane Camille. In one (No. 18) records of the tuberculin test were lost for the same reason. Three (Nos. 20, 25, and 57) were put on multiple drug therapy at the request of their private physician. Although in all three of these people, in our opinion, there was very little justification for this, we honored their doctor's recommendations.

Seven (Nos. 12, 13, 22, 28, 30, 52, and 53) were put on chemotherapy upon admission to the Sanatorium as a routine measure.

Two (Nos. 24 and 26) showed atypical organisms of Runyon Group III on sputum culture. One (No. 53) showed atypical organisms of Runyon Group II on sputum culture. In all three instances, chemoprophylaxis had been in effect

less than one month and all three were routinely put on multiple drug therapy.

Eighteen (Nos. 11, 12, 13, 16, 17, 18, 22, 25, 26, 27, 30, 32, 33, 40, 45, 50, 53, and 56) showed x-ray evidence suggestive of active disease such as soft appearing shadows, cavitation, etc. on the first film. These films were taken usually within a few days to one month after the start of chemoprophylaxis. No one of this group was ever found to have *M. tuberculosis* in sputum.

Category No. 9 is actually supposed to be cases with a grade 3 or 4 Heaf test or a 10 mm or over Mantoux with negative x-ray. In the seven people in this category, four of them (Nos. 13, 27, 50, and 53) had taken isoniazid for less than one month before the first x-ray showed evidence of disease. These had no other category to be put into so were left in category No. 9. Two (Nos. 12 and 32) had x-ray films negative on first films, but developed lesions in the lung at a later date. The other patient in category No. 9 (No. 57) had a negative x-ray all along but because of a strongly positive Heaf test, a local physician requested that she be placed on multiple drug therapy.

Although none of these 25 people were proven to have tuberculosis by culturing the organism, there remained the probability that there may have been insufficient efforts to obtain sputum from some of them. This may have been especially true in the case of the seven children in the group. With this in mind, the records were searched for ones with negative sputum but in whom the following criteria were present that indicated that active disease was present. We looked for someone who had a significantly positive tuberculin and who took the isoniazid regularly for at least two months. Were there any that, in spite of the above and with a previously negative x-ray film or with a stable appearing lesion, developed a suspicious lesion or had evidence of instability of a lesion present? In such a case did the x-ray clear upon institution of multiple drug therapy within a reasonable length of time?

Admittedly the above are rather stringent requirements for diagnosis of active disease but it would be hard to eliminate any of them and feel justified in using the remaining as evidence against the effectiveness of chemoprophylaxis.

We were unable to find such among these 25 persons. In evaluating these 25 people then, it is our belief that not a single one had been a failure of chemoprophylaxis.

Thirty-two cases were put on therapy because of the finding of *M. tuberculosis* in the sputum. Of these cases, 11 were found to have taken very

little of the isoniazid. Of the 21 other cases of positive sputum, all of them were found to have had active disease at the time the chemoprophylactic drug was started. All of these 21 had the medication started when the positive tuberculin was discovered. The sputum sent in to the laboratory at or about the same time the tuberculin test was read was reported several weeks later to be positive for *M. tuberculosis*.

On the basis of all findings then, there was not a single case out of the 14,633 on chemoprophylaxis that developed proven active disease provided the patient took the isoniazid as directed. One hesitates to report such a perfect result. In a program such as ours conducted by 82 different county health departments of varying ability and interest, some mistakes may have been made in the records or perhaps in the reporting of our experience.

A question naturally arises as to how many of these 14,633 people would have developed tuberculosis if no chemoprophylaxis had been given. We know that in the United States in 1968, 21.3 new active cases per 100,000 appeared in the general population.⁵

The people we are considering are high risk ones. We would therefore expect a larger number per 100,000 to develop tuberculosis. The U.S.P.H.S. study was conducted on a similar high risk group. Out of 30,779 people that received placebo instead of isoniazid after having been followed for over an average of 7.5 years, 502 cases of tuberculosis developed.

This would give an average annual case rate of 217.5 cases per 100,000 population. Therefore, in their high risk group, tuberculosis was 10 times more frequent than in the general population.

In regard to the Mississippi people, our figures cannot be directly compared to those of the U.S.P.H.S. since their criteria for inclusion in the study was a 10 mm positive P.P.D. (grade 3 Heaf). In our individuals, a 10 mm positive P.P.D. (grade 3 Heaf) was required only in category No. 9. In fact, some of the household contacts (category No. 1) had negative tuberculin tests.

In the 2,193 people that finished one year of chemoprophylaxis, no cases of tuberculosis developed. Out of 12,440 persons not having finished one year of chemoprophylaxis, 32 developed tuberculosis. This would be an average of 114.3 per 100,000 per year. Although this rate was only around half that reported in the U.S.P.H.S. survey, it is still 5.4 times the rate for the general population.

In order to evaluate the impact of our chemo-

prophylactic program on tuberculosis in Mississippi, the annual new active case rate for the ten years before the institution of our program is shown in figure 4.

During the years 1959, 1960, and 1961, the rapid decline in new active cases was mainly due to lack of reporting and poor case finding.

In 1963, our present control program was put into effect and the number of new active cases surged upward in 1964 as the previously unreported cases were ferreted out of the county health departments' files and reported to the register. During 1965 a readjustment took place and the new active cases reported dropped from the peak of 751 in 1964 to 661. Then in 1966 and 1967, a leveling off took place and the new active cases fell only from 661 in 1965 to 654 in 1966, a matter of 7 cases, and to 616 in 1967, a drop of 38 cases.

Our chemoprophylactic program was put into effect in November, 1967. The new active case rate, in spite of careful attention to case finding and reporting, dropped from 616 in 1967 to 558 in 1968, a fall of 58 cases. In 1969 new cases numbered 457, a drop of 101 in new active cases.

Inasmuch as chemoprophylaxis is the only new factor added to our routine in 1968 and 1969, we feel that if the acceleration in the decline of new active cases continues, it will have to be credited to chemoprophylaxis.

CONCLUSION

A review of the state tuberculosis register for the last 12 years reveals that since our chemoprophylactic program was put into effect, there has been a definite acceleration of rate of decline in the new active cases reported to the register. If this continues, it will indicate that chemoprophylaxis is one of the most important factors in control of tuberculosis in Mississippi. We believe that it warrants the attention and cooperation of all physicians and medical facilities in the state.

★★★

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Acute Bacterial Infections in the Newborn

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ACUTE BACTERIAL INFECTIONS are a significant primary or contributing cause of death and serious morbidity in the neonatal period. Yet, with currently available therapeutic measures, most bacterial infections are curable. The morbidity and mortality from infections in the newborn have decreased since the advent of antibiotics, but this decrease has not been as dramatic for the newborn as for other age groups. The peculiarities of the neonate and his environment which are relevant to the etiology, pathogenesis, and clinical expression of infection are discussed here, in an effort to aid the physician in suspecting and diagnosing infection at the earliest possible moment. Emphasis is then placed on prompt initiation of therapy particularly appropriate to the neonate.

Numerous bacteria have been reported as etiologic agents in acute infections of the neonatal period. However, published series on the five major infectious processes in the neonate (sepsis, meningitis, pneumonia, urinary tract infection, and diarrhea) have shown the gram-negative or enteric organisms to be the most frequent offenders. In a recent review of several series¹ extending from 1927 to 1968, gram-positive organisms, predominantly beta hemolytic streptococcus, were found to be the most frequent offender prior to 1944. Since 1944, with one exception,² the gram-negative organisms, predominantly *E. Coli*, were found to be the most frequent offenders. In that instance, the change from gram-positive to gram-negative organisms did not occur until after 1959. An explanation for this is not readily apparent but the point to be emphasized is that the organisms associated with infections do vary from hospital to hospital.

It has been noted,¹ that when cases of sepsis are arranged according to age at onset, a division at 72 hours reveals a definite grouping of the etiologic agents. This grouping has definite thera-

Acute bacterial infections are a significant primary or contributing cause of death and serious morbidity in the neonatal period. Currently available therapeutics, especially the antibiotics, have rendered most bacterial infections curable. The authors discuss the various etiologic agents and suggest appropriate therapy.

peutic implications affecting the choice of antibiotic therapy to be instituted prior to the identification of the specific etiologic agent. Table I is a listing of the most common pathogens in acute bacterial infections before and after 72 hours of age.

Diarrhea differs from the other major infections of the newborn in regard to the etiologic agents involved. Although many diarrheas in the newborn period are of non-bacterial etiology, bacterial diarrheas do occur with significant frequency. *Pseudomonas* and *proteus* have been described as possible etiologic agents, in those infants in whom an overgrowth of either of these agents has occurred. *Salmonella* and *Shigella* occasionally cause diarrhea in the newborn.

E. Coli is not usually considered a pathogen, but there are known pathogenic strains of *E. Coli* which have produced epidemic diarrhea in the newborn. Stool cultures should be obtained in all cases of diarrhea and the laboratory should be requested to identify the predominant organisms. A report of "no pathogens noted" is not sufficient.

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If *E. Coli* predominates on culture, specific typing should be done to identify possibly pathogenic strains. If this service is not available locally, it can be obtained from the Mississippi State Board of Health.

The two basic factors in the pathogenesis of infections in the newborn are: 1) the neonate's state of impaired host-resistance and 2) the presence of certain environmental factors predisposing to infection.

The impaired host-resistance of the fetus and neonate reflects the immature state of the diverse systems which must participate in meeting a bacterial challenge. The first barrier to invasion, the skin and mucous membranes, is usually adequate unless an inoculum of bacteria is introduced past the barrier through open wounds such as the umbilical stump or unless the inoculum is of such an amount as to overwhelm the system, as in amniotic infection syndrome. Two factors important to clearing or localizing an infecting force which has penetrated the surface barrier are the inflammatory response and the phagocytosis of foreign particles by leukocytes. Both these processes have been demonstrated to be impaired in the newborn.^{3, 4}

Humoral factors are also important to host-resistance. It is known that the human fetus can respond to bacterial, viral, protozoal and spirochaetal infections in utero by producing antibodies, particularly those of the immunoglobulin M (IgM) fraction.⁵ In the noninfected intrauterine environment, however, the fetus acquires his usual complement of immunoglobulins solely by placental transport from the mother,⁶ this

to gram-negative organisms are in the IgM fraction, but the significance of this deficiency regarding the increased occurrence of gram-negative infections is not fully understood. It is interesting to note that the only period of life during which the human is subject to primary sepsis caused by colon bacilli is the first two weeks of life.⁷

Another factor in acquiring immunity to specific infections is delayed hypersensitivity. Neonates are known to develop delayed hypersensitivity, but the rate of its development is much slower than in older children and adults.⁸

ENVIRONMENTAL FACTORS

Table II is a list of prenatal and postnatal environmental factors that are known to predispose the infant to infection. Infants born to mothers with infections, particularly infections of the urinary tract, cervix, and vagina, are known to have an increased incidence of infection.^{9, 10} As much as a six-fold increase in the incidence of infection among neonates born to mothers with urinary tract infections at the time of delivery has been documented.¹⁰ Even when a specific locus of maternal infection cannot be identified, an increased number of infected infants are born to febrile mothers.¹¹ Rupture of fetal membranes greater than 24 hours prior to delivery has been well documented as predisposing to the events leading to infection in the neonate.¹² One to 30 per cent of cases of amnionitis has been reported to precede systemic infection in the newborn.¹³ The amniotic infection syndrome has been well characterized by Blanc¹⁴ as related to prolonged rupture of fetal membranes with ascending infection.

Excessive manipulation of the fetus during labor as well as excessive bleeding from placenta previa or abruptio placenta have been associated with an increased incidence of infections in the neonate. The exact mechanism is unknown but an increased opportunity for organisms in the vagina to gain access to the placenta and the fetal circulation is postulated. Infants having an episode of fetal distress as indicated by either passage of meconium or variations in fetal heart rate, have been found to have an increased incidence of infection.¹⁵ The unclean delivery, as a predisposing factor to infection, is distinguished from the "unsterile" delivery since an occasional infant may be contaminated with maternal excreta under the best precautions in the delivery room.

Postnatal environmental factors predisposing an infant to infection are particularly revelant to those infections with onset after 72 hours of age. These circumstances may present the infant with

TABLE I
BACTERIAL AGENTS CAUSING INFECTION
IN THE NEONATAL PERIOD

<i>Infection Prior to 72 Hours of Age</i>	<i>Infection After 72 Hours of Age</i>
<i>E. Coli</i>	<i>Pseudomonas</i>
<i>Klebsiella-Aerobactor</i>	<i>Proteus</i>
<i>Enterococcus</i>	<i>Klebsiella-Aerobactor</i>
<i>Beta Hemolytic Streptococcus</i>	<i>E. Coli</i>
<i>Staphylococcus</i>	<i>Staphylococcus</i>

being primarily those of the immunoglobulin G (IgG) fraction. Since immunoglobulin M and immunoglobulin A are not transferred across the placenta, the previously noninfected infant is delivered deficient in these factors. The antibodies

an inoculum of organisms in such a manner or in such an amount as to produce infection. A difficult resuscitation, particularly if requiring endotracheal intubation or umbilical vessel catheterization, offers many opportunities to introduce organisms into a normally sterile area of the child's body. The danger of seeding and facilitating infection is further increased when foreign bodies such as umbilical vessel catheters and endotracheal tubes are left indwelling. The increasing risk of systemic infection after 24 hours of indwelling umbilical catheters may justify the initiation of antibiotics. It is the authors' practice in such cases to initiate antibiotics as in suspected sepsis.

Low birth weight infants, premature or small for dates, have an increased incidence of infection probably related to an exaggerated immunologic immaturity and to frequent association with the environmental factors predisposing to infection both pre- and postnatally.^{15, 16} Congenital malformations most commonly predispose to infection by providing a portal of entry as in leaking meningomyeloceles.

NURSERY SURVEILLANCE

Exposure to particularly pathogenic agents resulting in infection is usually the result of inadequate nursery surveillance for these pathogens and failure to adhere to methods designed to reduce their presence in the nursery to the lowest possible level. Epidemics of sepsis have been reported in nurseries using inappropriately cleaned equipment, particularly suction equipment and isolettes.¹⁶ Nursery personnel and nursing mothers must not be overlooked as possible reservoirs of pathogenic organisms. The single most important measure in controlling intra-nursery spread of infection is rigidly enforced hand washing by all personnel before handling each infant.

The nonspecific symptomatic expression of clinical illness in the neonate is the peculiarity of this age group most frustrating to the physician with infants in his charge. This is particularly true for the subtle, early signs of systemic infection. However, the alert, experienced nurse who is frequently handling and feeding the child will often, in the absence of obvious signs, develop the impression that the infant is "not doing well." When this is brought to the attention of the physician, he is well equipped with a strong suspicion of infection, especially when supported by a history of aspects of pregnancy, labor, delivery, or clinical course predisposing to infection. Then with careful review of the infant's behavior and feeding pattern and with careful physical examination including, most importantly, a period of

observation of the infant's activity, one can usually itemize a few of the nonspecific but definite changes which have occurred. The most frequent of the early signs of systemic infection are variations of activity—lethargy or irritability,

TABLE II
ENVIRONMENTAL FACTORS PREDISPOSING TO INFECTION

<i>Prenatal Factors</i>	<i>Postnatal Factors</i>
1. Maternal infections-fever.	1. Difficult resuscitation.
2. Prolonged rupture of fetal membranes.	2. Noninfectious illnesses. Umbilical vessel catheterization.
3. Amnionitis	Surgical procedures.
4. Excessive bleeding during labor.	3. Low birth weight.
5. Difficult delivery.	4. Congenital malformations.
6. Unclean delivery.	5. Exposure to particularly pathogenic agents. Improperly washed hands of personnel
7. Fetal distress.	Improperly cleaned equipment
	Maternal or nurse carrier.

variations in temperature—hypo- or hyperthermia, variations in feeding pattern—decreased intake and variations in respiratory pattern—respiratory distress or apnea.^{1, 18} Table III provides a list of the more common signs and symptoms associated with systemic infection.

LACK OF SPECIFICITY

The lack of specificity of an infant's symptomatology must be re-emphasized. For example, one must be aware of the broad differential diagnosis which must be entertained when an infant has a seizure. In addition to meningitis, seizures may be the result of such noninfectious etiologies as intracranial hemorrhage, anoxia, hypocalcemia, hypoglycemia, and hyponatremia. A similar differential diagnosis has to be made for the many other signs and symptoms such as respiratory distress, jaundice, abdominal distention, and petechiae which may be present in the infant suspected of infection.

To aid the physician in distinguishing the infected infant from the noninfected one, much effort has been invested in a search for useful laboratory studies.

For the purpose of identifying the infant infected at birth, various examinations of fetal adenexa,¹⁹ umbilical cord,²⁰ and gastric contents²¹ for the presence of inflammatory cells

and bacteria have been employed. These techniques, though sometimes helpful in a particular case, have not been found routinely useful. Positive results occur with contaminated, though not necessarily infected, infants and negative findings are not infrequent with infants who become clinically infected within 24 to 48 hours of birth. For these reasons few centers employ these methods routinely.

Determination of IgM levels in cord blood is now being employed in some centers to detect both acute and chronic infections of intrauterine onset. This method, however, is of no aid in diagnosing infection of recent onset. The complex subject of neonatal immunology including the use of this method is exhaustively reviewed in part II of the December, 1969 issue of the *Journal of Pediatrics*.

Other laboratory parameters commonly used to support a diagnosis of infection in other age groups, particularly the white cell count and differential, have not been found as useful for the neonate. The white cell count must be beyond the extreme of 25,000 WBC/mm³, or less than 4,000 WBC/mm³ to lend significant support to a diagnosis of infection but the absence of these extremes does not rule out the possibility of infection. With the presence of a normal relative neutrophilia up to 60 per cent of the total cell count in the first 24 to 48 hours of life, the differential count loses its usefulness in reflecting infection. Thrombocytopenia and evidence of hemolysis without blood group incompatibilities are occasionally associated with, but are not indicative of, severe infections.¹

TABLE III
SIGNS AND SYMPTOMS COMMONLY
ASSOCIATED WITH SYSTEMIC INFECTIONS
IN THE NEONATE

"Not doing well"
Poor Feeding
Hyper-or-Hypothermia
Lethargy or Irritability
Disturbances of respiratory pattern—respiratory distress or apnea
Seizures—generalized or focal
Jaundice—with or without hepatosplenomegaly
Abdominal distention, vomiting or diarrhea

Urinalysis, particularly if obtained sterilely by suprapubic bladder aspiration, is useful. Demonstration by gram stain or culture of any bacteria in such a sterilely obtained specimen is indicative

of a urinary tract infection. In the sick infant, it is suggestive of a systemic infection since the urinary tract may be a site of disposal of bacteria disseminated by the blood stream as well as a portal of entry for bacterial infection. Microscopic examination of a fresh uncentrifuged specimen obtained by bladder aspiration which reveals more than two or three WBC's per low power field also supports a diagnosis of infection.¹

EXAMINATION OF CSF

Examination of CSF is imperative in any sick infant suspected of having systemic infection. One third of the cases of neonatal sepsis are complicated by meningitis¹ and about two-thirds of cases of meningitis are associated with sepsis.¹⁸ The diagnosis can be established immediately if organisms are seen on gram stain of CSF. The gram staining characteristics of the organism are also of assistance in selecting the antibiotics to be used. In the absence of organisms on smear, the presence of meningitis can be inferred from a cell count of greater than 10, particularly if polymorphonuclear cells predominate. A CSF glucose of less than one-half the serum value also suggests meningeal infection. An elevated CSF protein, >125 mgm per cent, supports a diagnosis of meningitis with other evidence, but is less specific than the cell count and the glucose level.^{1, 18}

Blood cultures, CSF and urine cultures are keys to establishing a diagnosis and identifying the etiologic agent. Routine cultures of cord, skin, and throat at times yield helpful clues, but have not been found reliable in demonstrating the pathogen in sepsis.

PRESUMPTIVE DIAGNOSIS

With the definitive diagnosis of infection dependent upon the results of cultures which may not be available for several days following the initial evaluation, it is apparent that one must make a presumptive diagnosis on clinical judgment if he is to initiate treatment early. One must appreciate this uncertainty and accept the fact that some infants will be treated unnecessarily. Antibiotics properly selected and administered in the proper dosage are of negligible risk to the well child compared to the odds against an infected infant who is not treated or for whom treatment is delayed.

Management of acute bacterial infections begins with a presumptive diagnosis. In most cases the specific etiologic agent is unknown although gram stains of CSF and urine may have given valuable clues. Positive identification of the organism and determination of its specific antibiotic sensitivities requires time which the infec-

TABLE IV
ANTIBIOTICS COMMONLY USED IN THE NEONATAL PERIOD

<i>Antibiotic</i>	<i>Indications</i>	<i>Parenteral Dosage</i>	<i>Toxicity and Comments</i>	<i>Intrathecal Dosage/1cc Saline</i>
Penicillin-G	Gram-positive infections or presumptive sepsis before age 72 hours	100,000 u/kg/d IM or IV q 12h	q 6-8 hr after age 5 days	—
Ampicillin		100 mg/kg/d IM or IV q 12h		—
Kanamycin	Nonpseudomonas gram-negative infection—with a penicillin for presumptive sepsis	15 mg/kg/d IM q 12h	Renal and auditory toxicity rare in infants	1 mgm.
Polymyxin-B	Known or suspected Pseudomonas infection	4 mg/kg/d IM q 12h	Alternate drug for pathogenic E. Coli	1 mgm.
Colistin		8 mg/kg/d IM q 12h		Not to be used
Methicillin	Penicillin resistant gram-positive infection—presumptive sepsis after age 72 hr.	200 mg/kg/d IM q 12h	q 6-8 hr. after age 5 days Nephrotoxic in high doses	—
Nafcillin		200 mg/kg/d IM q 12h		—
Neomycin	Bacterial diarrhea Enteropathogenic E. Coli	50-100 mg/kg/d P.O. q 4-6h	Not used parenterally	Not used

ted infant can ill afford. Therapy must be initiated immediately with antibiotics chosen from a consideration of the most likely etiologic agents and their sensitivities. In the choice of antibiotics one must also recognize a need for thorough coverage and the greatest possible effectiveness because of the rapid progression of infection in the neonate. One must be aware of the uniqueness of antibiotic metabolism in the neonate which makes proportionate reduction of the usual dose schedules grossly inaccurate and makes the usual considerations of toxicity inapplicable.

Based upon these considerations, it is our practice and the practice of most centers to begin therapy with kanamycin and either penicillin-G or ampicillin when a presumptive diagnosis of systemic infection is made within the first 72 hours of life. Kanamycin is important for its broad coverage of E. Coli and Klebsiella-Aerobacter, most strains of Shigella and Salmonella, and some strains of Proteus and Pseudomonas. Though renal and auditory nerve toxicity are observed relatively frequently in older children and adults receiving kanamycin, these are rarely encountered in the infant. Much experience and study has shown the recommended dose of 7.5 mg/kg given every 12 hours to be effective and safe.²² Ampicillin is increasingly being cho-

sen over penicillin, in spite of its expense, for its effectiveness against Proteus mirabilis, H. influenza, many strains of E. Coli and Salmonella and some strains of Klebsiella-Aerobacter, as well as the penicillin sensitive gram-positive cocci.

If onset of sepsis is suspected after 72 hours, the possibility of a penicillin-ampicillin resistant staphylococcus indicates the use of an agent to which these are usually susceptible. Methicillin appears to be the drug of choice and it is substituted for penicillin-ampicillin in the usual regimen. Nafcillin may also be used.

Pseudomonas must be considered with any sepsis and particularly those with onset after 72 hours. Whenever pseudomonas is suspected, polymyxin-B or colistin should be included in the initial antibiotics. If meningitis is present, polymyxin-B should be administered intrathecally since neither polymyxin nor colistin cross into the CSF in appreciable amounts. Colistin should never be used intrathecally.

With these few drugs, penicillin-ampicillin, kanamycin, methicillin-nafcillin, and polymyxin-B—colistin, one has the antibiotic armamentarium necessary to treat almost all acute systemic bacterial infections encountered in the nursery. Rarely will culture and sensitivity studies indicate the need for other antibiotics with which neonatal

experience is limited or increased risk of toxicity is known. Antibiotics to be avoided in the newborn period for these reasons include chloramphenicol, tetracycline, sulfonamides, lincomycin, cephalothins, nitrofurantoin, novobiocin, nalidixic acid and gentamycin.^{22, 23} Table IV presents indications and dosage schedules for antibiotics in the neonatal period.

Having begun an infant on an antibiotic regimen with a presumptive diagnosis of systemic infection, the course is continued until culture and sensitivity studies are complete or clinical deterioration of the infant indicates a need for immediate alternation of therapy. If a single organism is cultured and found sensitive to a single antibiotic, then this antibiotic should be continued alone. For example, if a Beta-hemolytic *Streptococcus* sensitive to penicillin-G is cultured, then penicillin should be continued alone for a full ten-day course and kanamycin should be discontinued from the initial regimen.

If the organism is found sensitive to neither of the initial antibiotics, then the least toxic alternative, to which the organism can be demonstrated to be sensitive, should be substituted and the original antibiotics discontinued. If no organism is demonstrated on cultures and the clinical course is one of improvement, it is our policy to continue the initial antibiotics for a full course. Some centers, however, discontinue antibiotics after three days and then repeat cultures after another 24 hours of observation. If the infant is clinically deteriorating, the cultures are repeated and polymyxin-B is substituted for kanamycin to cover the possibility of *Pseudomonas* or resistant *E. Coli* as the infecting organism.

DIAGNOSTIC STUDIES

While awaiting cultures, with the infant begun on therapy, one should continue diagnostic studies to demonstrate the primary focus of infection and to rule out noninfectious disease processes. With the completion of these studies and the reporting of positive cultures, the extent of the infection can be more clearly defined as sepsis, meningitis, pneumonia, urinary tract infection or a combination of these, and the therapeutic plan can then be widened to include any special considerations relevant to these specific entities as will be discussed.

With the presumptive diagnosis of systemic infection, sepsis is assumed. A definitive diagnosis is made with a positive blood culture in a symptomatic patient. If the physician is appropriately aggressive in his approach to infection, sepsis will

not infrequently be suspected and treated, but because of negative blood cultures will remain unproven. This is particularly true of such cases as aspiration syndromes which may be treated on the basis of high risk prior to the onset of symptoms.

Antibiotics as initiated or as altered on the basis of culture and sensitivity should be continued parenterally for seven to ten days depending on the clinical response. Follow-up cultures are important in evaluating the effectiveness of therapy.

Antibiotic therapy should be supplemented with appropriate supportive measures. The most important of these is attentive nursing care and observation. If the infant is feeding poorly or the severity of his symptoms indicate the possibility of aspiration, appropriate fluids, calories, and electrolytes should be administered intravenously until significant clinical improvement occurs. Adequate pulmonary ventilation must be maintained. The airway should be cleared by suction as often as necessary. Periods of apnea should be anticipated and watched for; electronic monitoring is useful but does not substitute for the attentive nurse. Artificial ventilation may be intermittently necessary if periods of severe apnea associated with bradycardia occur.

OXYGEN ADMINISTRATION

Oxygen should be administered only as required to maintain adequate oxygenation. When oxygen is used, the concentration in the inspired air should be monitored hourly and the blood gases followed to prevent hyperoxygenation. The rectal temperature should be monitored and maintained within the limits of 97 to 99°F. The warm environment of an incubator is usually sufficient if an isolette is not available. Either of these closed environments also provides adequate isolation if strict hand washing to the elbows before and after each handling of the infant is observed by all personnel. Hyperthermia (a rectal temperature >103°F) should be managed with tap water sponges. Antipyretics are rarely, if ever, necessary.

OTHER COMPLICATIONS

Less common complications, but ones for which the physician must be alert, are endotoxic shock, intravascular coagulation, and inappropriate antidiuretic hormone secretion resulting in hyponatremia.¹ The possibility of concomitant or superimposed infections by organisms resistant to the antibiotics in use must be kept in mind as well as the possibility of drug toxicity.

Meningitis must be ruled out whenever systemic infection is suspected. The early signs are

indistinguishable from those of any serious infection. The classical signs, bulging fontanelle and stiff neck, are not reliably present.¹⁸ With an atraumatic lumbar puncture the diagnosis can usually be established immediately by the studies previously discussed. If a traumatic tap is obtained this fluid should be cultured but the procedure should be repeated in 12 to 24 hours in an attempt to obtain fluid satisfactory for study even though antibiotics have already been initiated. The diagnosis of meningitis, if present, is imperative since intrathecal administration of antibiotics may be necessary for effective treatment.

If the diagnosis of meningitis is made with the initial lumbar puncture, therapy should be initiated as with sepsis. If the infant is very ill and numerous organisms are seen on smear, intrathecal administration of antibiotics should be initiated also. Penicillin-G or ampicillin should be used for gram-positive organisms unless penicillin resistance is suspected in which case methicillin may be used. Kanamycin would be the drug of choice for gram-negative organisms unless *Pseudomonas* is suspected. When *Pseudomonas* meningitis is suspected, then, regardless of the clinical condition of the patient, intrathecal administration of polymyxin-B must begin immediately since parenterally administered polymyxins, including colistin, do not enter into the CSF in appreciable amounts. Colistin should never be given intrathecally.^{22, 24}

INTRATHECAL ADMINISTRATION

Whether or not intrathecal antibiotics are included in the initial treatment, a repeat lumbar puncture should be performed after 24 to 36 hours of therapy. If organisms are present on smear at this time, intrathecal antibiotics are indicated. If the clinical response has been poor, the possibility of *Pseudomonas* meningitis must be covered by the initiation of polymyxin-B intrathecally and parenterally.²³ The dosage for intrathecal administration is given for each of the drugs in Table IV.

One should be certain of good needle position and free flow of spinal fluid before injecting antibiotics intrathecally. The drug must be diluted either with saline or with CSF prior to injection. It is judicious to drain off at least an equal volume of CSF prior to injection of a drug containing solution. The usual schedule of intrathecal therapy is to give daily injections for three days then every-other-day until the CSF has been found clear on three successive occasions. Parenteral antibiotics are continued for one week after the infant is afebrile and the spinal fluid is clear.

If in the course of treatment, there is continuing

fever and slow clinical response in spite of progressive clearing of the CSF on serial study, subdural taps are indicated, particularly if focal neurological signs or increasing head circumference are evident. If subdural effusions are found, serial taps should be performed until these are dry. If hydrocephalus develops, a neurosurgeon should be consulted to assist in exploring the possibility of ventriculitis with obstruction.

Bacterial pneumonia is a relatively common infection in the neonate. It may occur as a primary infection, as a secondary infection with septicemia, or as a superimposed infection with aspiration syndrome, hyaline membrane disease or other noninfectious respiratory diseases. When the diagnosis is suspected, it should be supported by chest x-ray and the identification of the etiologic agent should be attempted with cultures of blood, tracheal aspirate, and pleural fluid, if obtainable. Cultures of the upper airway serve only to confuse the clinician. Antibiotic therapy and supportive measures should be instituted as with a sepsis with particular attention applied to maintenance of adequate ventilation and oxygenation.

URINARY TRACT INFECTION

In an infant with symptoms of a systemic infection, bacterial growth from sterilely obtained urine may reflect either a primary urinary tract infection, or urinary deposition of blood-borne organisms. This distinction does not affect initial therapy since treatment for sepsis would be initiated in either case. However, a positive urine culture does present the need for further diagnostic studies. An intravenous pyelogram and cinecystogram should be obtained to rule out urinary tract anomalies and urine cultures should be obtained on follow up to rule out chronic urinary tract infection.

NEWBORN DIARRHEA

The management of acute bacterial diarrheas in the newborn is not based upon the treatment of septicemia as is the treatment of meningitis, pneumonia, and urinary tract infections. Though diarrhea may be associated with sepsis, it most often presents as an isolated entity. When bacterial diarrhea is suspected, neomycin is the initial drug of choice. The usual dosage is 50 to 100 mgm/kgm/day given orally. A five-day course is usually sufficient to clear the GI-tract of pathogenic *E. Coli*, the most common cause of bacterial diarrhea. Rarely will cultures indicate a need to change antibiotics. In those instances of pathogenic *E. Coli* resistant to neomycin, polymyxin-B 20 mgm/kgm/day p.o. is usually effective. As exceptions,

Shigella and Salmonella are best treated with ampicillin. Parenteral antibiotics are indicated only with systemic symptoms suggesting sepsis.

With diarrhea, antibiotic therapy is only a small part of the total management. Mortality and severe morbidity are almost always a consequence of major fluid and electrolyte imbalances. Therefore, when dealing with an acute diarrhea, particularly in an infant, one's emphasis in management must be on maintenance of fluid and electrolyte balance.

The isolette or incubator does not afford adequate isolation for acute diarrheas. Their epidemic nature makes it imperative that infected infants be isolated on a separate ward with the attending personnel having minimal, if any, contact with unaffected infants.

In conclusion, the authors would like to emphasize the importance of the nurse's role in identifying the infant who is not doing well so that diagnosis and treatment may precede the development of severe morbidity. Their diligent attention to every infant, for all are at some degree of risk, is to be greatly encouraged. ★★★

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EQUINE EQUANIMITY

"Last week," said the trainer of questionable sportsmanship, "I gave my horse a big shot of amphetamine and a grain of morphine just before the big handicap."

"Gosh," replied his companion. "Did he win?"

"No," sighed the trainer, "but he was the happiest horse in the race."

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Radiologic Seminar XCIX

Endometriosis: An Unusual Cause of Colon Obstruction

WALTER T. COLBERT, M.D.

Natchez, Mississippi

AN ADMITTEDLY RARE cause of large bowel obstruction is involvement of the colon, usually the sigmoid, by endometrial implants. An occasional instance will be seen where differential diagnosis from carcinoma of the large bowel cannot be made pre-operatively. In other instances,

the clinical pattern and roentgenologic picture suggest some sort of benign process producing partial or complete colon obstruction, but again, a definite diagnosis cannot be rendered pre-operatively. Just such a patient was encountered at our institution recently. Her case report appears below.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Jefferson Davis Memorial Hospital.

Case Report—Mrs. CM, 45 year old white female, presented with a chief complaint of generalized abdominal cramping, principally in the mid and lower abdomen, and increasing consti-



Figure 1. Barium enema examination demonstrating a smooth "compression" of the descending colon just at the iliac crest.



Figure 2. Lateral view of sigmoid and descending colon demonstrating the same defect.

pation. There had been no rectal bleeding, or other symptoms related to the gastrointestinal tract at the time of admission. A significant item in the past history was noted, the patient having had abdominal hysterectomy and right salpingo-oophorectomy some ten years earlier, for benign disease. At the time of the previous surgical procedure, no evidence of endometriosis was apparent.

Plain films of the abdomen made on admission demonstrated changes interpreted as representing distal descending or sigmoid colon obstruction, with considerable retention of fecal material proximal to the site of suspected obstruction. Multiple cleansing enemas were administered, and barium enema examination was carried out.

A rather definite, but somewhat atypical constrictive lesion was noted in the upper sigmoid (figures 1, 2 and 3), but a definite diagnosis could not be rendered. It was noted that the mucosal pattern in this area was well preserved, and it was felt that a malignant colon lesion was unlikely.

At operation, the left fallopian tube and ovary were involved in an extensive endometriosis, with multiple adhesions in the left pelvis. The endometrial mass had produced partial obstruction of the colon at the level noted on the films. It did not appear to the operating surgeon that the endometriosis had actually penetrated the bowel wall, and bowel resection was not deemed necessary. The patient recovered uneventfully.

In summary, a rather unusual instance of partial distal colon obstruction on the basis of endometriosis has been presented. The lesion in

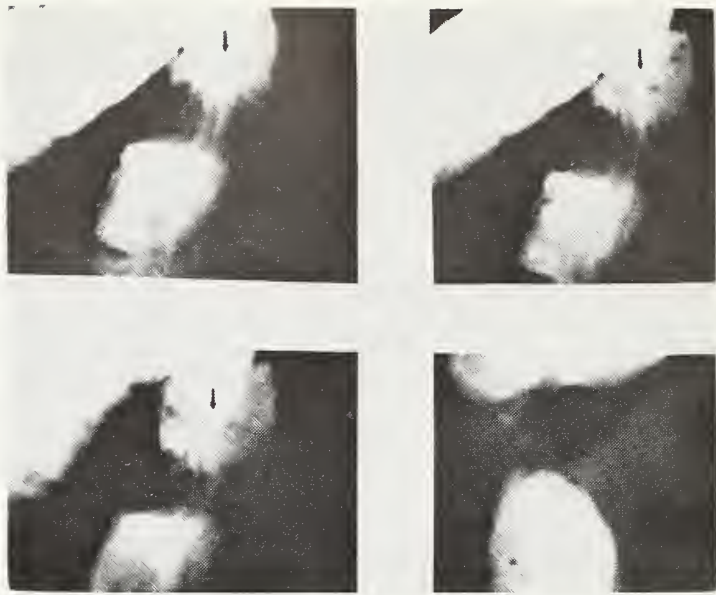


Figure 3. Spot films of the descending colon area in question demonstrating the smooth appearance in the area of constriction, with apparent preservation of mucosal pattern.

question is relatively rare, but must be considered in the differential diagnosis of colon obstruction in the female, particularly those patients in the younger age groups. Complete recovery followed surgical excision of the endometriosis in this instance.

★★★

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HIGH STAKES

A generous tipper at a summer resort found a new waiter serving him one morning and asked, "Say, where's Pete, my regular waiter?" The new waiter smiled, "Sorry, sir, Pete won't be serving you anymore. I won you in a crap game last night."

Fifty-One Years in the Art: A Family Physician Remembers

A JOURNAL SPECIAL FEATURE

MODERN MEDICINE has lost much of the "art" of diagnosis used in the past says an 81-year-old general practitioner from Calhoun City, Dr. W. J. Aycock, who won the 1970 MSMA-Robins Award.

The award for outstanding community service by a physician was presented to Dr. Aycock at the 102nd Annual Session at Biloxi by President James L. Royals of Jackson and Mr. Williard Duvall of New Orleans, district manager for A. H. Robins Company of Richmond, Va.

Dr. Van B. Philpot, Jr., of Houston, Miss., whose father was a colleague of Dr. Aycock's, interviewed the veteran physician about his life of medical service and changes in the practice of medicine he has witnessed.

Dr. Aycock graduated from Memphis Hospital Medical College in May of 1912, passed the State Board examination, and set up practice at Bentley, Miss.



Dr. W. J. Aycock of Calhoun City displays the plaque he received as 1970 winner of the MSMA-Robins Award for outstanding community service by a physician.

He soon joined in partnership with Dr. B. C. Tubb at Smithville and spent four years

"doctoring" by horse and buggy in Monroe County. They delivered babies, treated pneumonia, malaria, typhoid fever, measles and other infectious diseases.

Dr. Aycock was interviewed by Dr. Van B. Philpot, Jr., of Houston. Dr. Philpot's father and Dr. Aycock were classmates and long-time friends. The veteran physician has many lively comments on medicine as it was and is practiced.

Dr. Aycock moved back to Calhoun County, but in July, 1917, practice was interrupted when he departed for World War I. He served as a First Lieutenant in the Army Medical Corps until the end of the war.

After the war, he took postgraduate training at the New York Postgraduate School and Tulane University School of Medicine. He returned to Mississippi, married and located at Derma, 1½ miles from Calhoun City, where he lives now. The year was 1919 and there were no paved roads so that the few Model T cars could only operate in dry weather. The doctor still made house calls by horse and buggy.

"One of the biggest improvements or boosts to the practice of medicine has been the building of modern roads," said Dr. Aycock. People can now get out and go to the hospital when they're sick and get medical attention in much less time, he pointed out.

Dr. Aycock especially appreciates the development of antibiotics, improved surgical techniques and the use of x-ray, but he adds that some of the old ways ought to be retained to successfully blend the art and science of medicine.

"We were taught to make our examination from what we could see and hear and what the patient told us and what we could feel. We were supposed to use our common sense and medical

training to put it all together to make a diagnosis," said Dr. Aycock.

The veteran physician estimated that he has delivered about three thousand babies, mostly in the patients' homes with only a friend or relative to assist. Despite the harsh conditions, Dr. Aycock said that he had only a few patients to expire and fever was uncommon. This was before the time of blood banks, too, so there were no transfusions.

Money was scarce and pay for services often consisted of a pig, a few bushels of corn or a yearling, remembers the doctor.

Dr. Aycock recalled the treatment for pneumonia when he was in the army; "Every day or two the doctor gave pneumonia antigen to every suspected case of pneumonia. The patients did so well that I used the antigen on all my patients when I got out of the army. I think it cut the length of the disease down to about nine days and the crisis to about six. It was a serum and I gave it until antibiotics were discovered," he says.

"I was taught that when a patient had pain in the abdomen, vomiting, tenderness that bordered the ribs on the right side and especially if he had jaundice, he had gall stones. This worked every time for me.

"Now they can't find all the gall stones, and don't operate just because one has those symptoms because I had them in 1967.

"I was hospitalized for jaundice and they couldn't find gall stones. After nine days I began to cramp a little, and they thought I had hepatitis.

"A few months later, I was jaundiced again and had the same symptoms. They decided I had cancer of the liver and did exploratory surgery and found five big gall stones. So I think if they'd use both the old and the new methods, they'd be in better shape," said Dr. Aycock.

Dr. Aycock was born in Phoeba in Oktibbeha County, and attended schools in Bentley and Calhoun City. He got his premedical training at Mississippi College in 1906 and went to medical school in 1908. He sold a team of oxen, four to the yoke, to help pay his way through medical school.

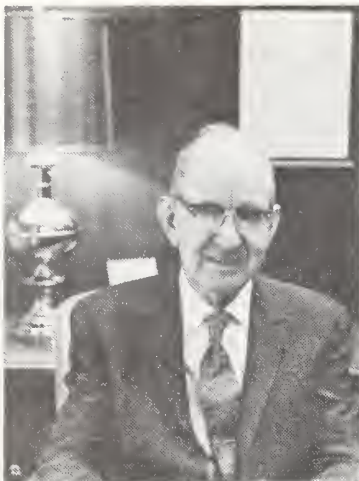
He has practiced medicine in Calhoun City for 51 years. He received his coveted 50-year service pin and certificate in 1962 in special ceremonies at the First Baptist Church of Calhoun City.

He has served his community through many channels including: chairman of the Board of Trustees of the Calhoun County Agricultural High School at Derma, 1923-34; chairman of the Calhoun City Special Consolidated School District, 1935-47; charter member of the Rotary Club and served as president 1940-41; 20-year member of Rotary Committee of the Hospital for Crippled Adults of Memphis; member of the Board of Deacons of First Baptist Church for over 20 years; 32nd degree Mason and Shriner; and member of the American Legion Post No. 50.

Dr. Aycock has twice been president of the Northeast Mississippi Medical Society and is an emeritus member of MSMA and a member of AMA. ★★★

QUESTIONABLE COMPLIMENT

A well-known violinist and his wife (also his accompanist) were whisked off by the hostess to meet the guest of honor. "Mr. Clay, I'd like you to meet Verdinni, the famous violinist. And this is Mrs. Verdinni who has quite a reputation, too!"



The President Speaking

'Dilemma in Blue'

PAUL B. BRUMBY, M.D.
Lexington, Mississippi

THE BASIC PROBLEMS of our relationship with the Mississippi Hospital and Medical Service have defied solution for almost 10 years. This organization is now the fiscal agent for Part A of Medicare and for the entire Medicaid Program. With this clearly in mind, I was grateful for an invitation to the Coast meeting of their board.

Their executives were certainly cordial and competent. The Mississippi Hospital Association administrators were outstanding and certainly were coping with their problems of hospital administration which let them speak with a common and effective voice.

The 10 public members are leaders in our state, well known for their effective and selfless contributions to civic and philanthropic causes. So true is this, that I am told four members are trustees of their local hospitals. The hospital trustees with their employees, the administrators, naturally should be hospital-oriented. But this hardly strikes a fair balance in a board which is self-perpetuating. There is little chance for achieving change in direction as long as this condition exists.

In 1968 after years of discussion and consultation, our House of Delegates withdrew our support from the Blue Shield Plan, but did agree for one year to explore other avenues and approaches to the inequity of this organization. The National Blue Cross-Blue Shield Board recommended six changes in their operations. The heart of these changes was the establishment of individual corporations for each and for each to stand on its own bottom with separate boards, and without intermingling of funds. Although this was done in a number of states successfully, it was refused here.

The MHMS board as then constituted reappointed the members of MSMA who were previously on their board. But they are there as individuals and not as a part of the structure of MSMA. These are outstanding members of our association who work tirelessly in our behalf and they wish for better direction in a consultative manner from MSMA. But it is hard to predict a permanent settlement when pay for hospital-based physicians is twice that of independent practitioners and the percentage of payout of Blue Shield is questioned.

The physicians whose enthusiastic support has built these organizations are the only contact the subscriber has with the Blue plans and it is getting increasingly difficult to explain the small payment from this source. Not many of us are happy awaiting the coming of National Health Insurance to make these problems mute.

★★★



The College and Cancer: Saga of Enlightened Leadership

I

CANCER is the number two killer of all age groups, and we may not be doing enough about it. The assertion may seem drastic, what with the outpouring of hundreds of millions in ongoing programs of research, maintenance of specialized institutions, a range of fellowships, and the work of one of the three most important and influential voluntary health organizations, the American Cancer Society.

But with only 890 approved cancer programs in the nation's 7,000-odd community and governmental hospitals, the challenge is clear. Of course, this doesn't mean that adequate care for the disease is available only where an approved program exists, but it's odds-on that the patient is better served when the professional resources and medical facilities are marshalled together with carefully defined objectives and stated goals.

The recommended cancer program of the American College of Surgeons is such a coordinated endeavor. It is conducted as a team effort in concert with the American Cancer Society and the Regional Medical Programs. Requirements for approval of a local cancer program are set out in the College's *Manual for Cancer Programs*. A special commission of the College over-

sees the entire undertaking, while individual Fellows at regional and state levels voluntarily devote time to leadership and coordination of local programs.

But one out of eight hospitals with an approved cancer program seems hardly enough.

II

It is not altogether a question of size and affluence as to the matter of a successful, approved cancer program. The College says that its Commission on Cancer "recognizes that both the physical facilities and the number of trained personnel available for the care of cancer patients vary widely among hospitals. However, the best facilities and well-trained personnel do not in themselves assure proper care of the patient with cancer if they are not fully used for their intended purpose."

And this is the clincher: "Small hospitals whose facilities are limited but whose personnel are well-trained and aware of their limitations frequently provide excellent care to the cancer patient. . . ."

The College bases its requirements for program approval upon a number of accepted precepts:

—Cancer belongs in that unique category of diseases which require, for the best care, that the

patient receive lifetime interval follow-through examination. This will vary, the College says, depending upon many factors, including age of the patient, site of the cancer, stage of the disease, and like considerations.

—Rapid advances in knowledge have led to new modalities of diagnosis and treatment, varying with the site of the disease and involvement in the care of different medical disciplines. The College believes that the patient treated with a multidisciplinary approach is likely to receive most benefit.

—No longer can we be concerned only with definitive treatment. Cancer must be considered as involving three broad areas: Early diagnosis, definitive treatment, and lifetime interval follow-through examination. Neglect of any of these areas, the College declares, is to be deplored.

III

The American College of Surgeons' Commission on Cancer has adopted guides for effective implementation of program requirements. Any program must begin with organization of a hospital cancer committee as a standing body. The multidisciplinary approach is emphasized in the committee membership which should include representatives of pathology, internal medicine, radiology, gynecology, pediatrics, family practice, surgery, and others as available.

A member of the committee should be responsible for maintenance of the registry. Supporting the requirement for this facet of the program, the College points out that lifetime follow-through is important in many disease entities, such as diabetes, rheumatic fever, heart disease, and certain collagen diseases.

Frequently, the question of why not a central—instead of a local—registry is raised. The guides state that the hospital-based registry has the primary function of service to the patient by assuring that he is followed and returned for examination. The secondary functions of incidence, trends, comparative results of therapy, and the like may not be available for an extended period of time, and depending on the interval, these results may or may not help those patients who have cancer now. In the past, central registries have emphasized these secondary functions. The hospital registry is the most valuable input source for central registries, but the College argues that this does not relieve the hospital of maintaining its own registry.

The proliferation of data processing hardware

or computers holds out great promise for tumor registries. The state of Mississippi has given legal protection to these service entities by furnishing a liability shield. In past years where medicolegal aspects demanded maintenance of patient anonymity, the same patient biopsied at three different clinics might show up as three different patients and not just one. The resulting distortion of the data is obvious.

IV

In a recent announcement, the College shows seven approved cancer programs in Mississippi hospitals. At Biloxi, there are ACS-approved programs in the Howard Memorial Hospital and the USAF Hospital at Keesler Air Force Base. The South Mississippi Tumor Clinic is conducted in the Memorial Hospital at Gulfport, and an approved program has been established at the Forrest County General Hospital at Hattiesburg.

Both the University Hospital and Veterans Administration Center at Jackson have programs, and one is conducted at Mercy Hospital-Street Memorial in Vicksburg.

Much encouraging activity has been initiated in Mississippi recently. A new program for detection of pelvic cancer has the support of the Mississippi Regional Medical Program, a result of adoption of a resolution at the 1969 Annual Session of the state medical association. Quick passage in the legislature of the liability shield for registries gave evidence of the growing public awareness of the importance of these service activities.



The pap smear program of the American Academy of General Practice has been greeted with success.

If we have not done enough in the past with the resources at our disposal, there is reason for optimism today with a forward thrust on many fronts. The efficient application of skills and resources already available may be as important as work in the research laboratory. In the meanwhile, the American College of Surgeons merits our support and is to be commended and thanked for its continued exercise of leadership in this vital field of patient care.—R.B.K.

Rx for Inflation and Drug Costs

A story is making the rounds about two men discussing a television address by President Nixon. One said, "Did you hear the President speak last night and what did you think of what he said?"

"I heard him," said the second man, "but I can't discuss the speech. You see, our TV set went on the blink before Eric Sevareid interpreted and explained what he said."

Of all the interpretation going on in this era of analysis and comment, none is more plentiful than that on the cost of medical care. Physicians come in for a lion's share of talk, usually on the mounting medical service component. The fact that M.D.'s have received only 11 per cent of every penny expended on Medicare and Medicaid since 1966 is of no moment to the analysts.

Likewise, the pharmaceutical manufacturing industry, an indispensable health care team partner, gets its share of the guff. And the fact that we have more and better drugs at lower prices confounds the doomsday analysts not one iota.

Anybody who has been to the supermarket lately or who has shopped for a new car doesn't need to be reminded that since 1960, the cost of all goods and services has risen to 135 from 104 on the 1957-59 consumer price index. But we are paying an average of only 54 cents more for a prescription than we were paying 10 years ago. The mean cost of the doctor's Rx today is \$3.68, and six out of 10 preparations speeding our recovery now were not even available in 1960.

The Bureau of Labor Statistics has a few interesting figures for us in this connection. We Americans place high priority on a few things we'd

be just as well off without: We spend \$78 per person per year on alcohol and \$48 on tobacco. For TV sets, the outlay is \$45 each and an unbelievable \$21 on foreign travel. The barber shop gets \$19 per year, but we shell out an average of only \$18 for prescription drugs.

Although the dramatic court action over the pricing of antibiotics drew comment about the "drug cartel," nothing could be farther from the truth. The pharmaceutical manufacturing industry is competitive on many more counts than price alone. Company struggles against company for superior quality control, advanced research, and public service lines from which a profit can never be realized.

It works, too, because of 868 new drug entities marketed from 1940 through 1969. The United States produced 536, while Switzerland introduced 57; Germany, 41; and Great Britain, 40.

The American drugmakers pay their own freight, too, not just in taxes but in costs of product development and research. Today, the federal government pays for 51 per cent of all research conducted by private industry. The aerospace group gets 81 per cent of its research money from the government. The electronics industry is dependent upon Uncle Sam for 59 per cent of its development financing, and the Detroit automakers get 28 per cent.

But the American pharmaceutical manufacturing industry pays 98 per cent of its research costs and accepts 2 per cent federal financing. Nor is this a nickel and dime outlay, either, because the drugmakers will spend \$600 million on research this year.

Put all of this together with the lengthening life span, lessening incidence of morbidity in selected disease areas, reduced hospital stays, and all the rest of the factors making us healthy, and we find that the drug industry has turned in a worthy stewardship and remarkable performance. Let us remember that the most important ingredient in a prescription drug cannot be seen or analyzed in the laboratory: It is quality and reliability. And neither a generic nor brand name drug is any better than the quality aims of the company that makes it. Isn't it nice to know that something we need so urgently is priced within reason? Especially when the main thing about it to go up is quality.—R.B.K.

Why Not More Dental Care Insurance?

Seven out of eight Americans have some form of medical service and hospital insurance or prepayment plan, but only three out of 100 have dental care coverage. Even the serious student of medical and health socioeconomics is hard put to come by an answer for this health care financing deficit, especially when dental care amounts to 10 per cent of our \$60 billion health service expenditure annually.

For many years, an overly simplified answer was usually given. We were quick to say that dental care insurance carried with it built-in bankruptcy, because about 80 to 90 per cent of all dental services are postponable. Generally, insurance is based on the concept of risk-spreading of things which happen quickly and suddenly, certainly, as opposed to something developing slowly and progressively. This, for example, is the reason for built-in time barriers in health care coverage for maternal services, hernia repairs, and the like.

But the need for dental care coverage is apparent, if we are to believe the figures on the state of the nation's teeth. Dental authorities say that there are between 800 million and a billion cavities among us quietly rotting away our teeth. The Surgeon General of the U. S. Public Health Service says that less than half of the 200 million-plus Americans were seen by a dentist last year. Four out of every five Americans over age 15 have some sort of gum disorder, and one child in four has a malocclusion of such magnitude that chewing causes facial distortion.

About 6 million Americans have dental service coverage, and half of it is written by the private insurance industry. Dental society service corporation plans account for the other half, according to the Health Insurance Institute. The Mississippi Dental Association voted to authorize a dental service corporation some years ago, but it has not yet been brought into being.

Most tax-supported programs of health care offer only minor and token dental services. Medicare and Medicaid are next to nothing, and CHAMPUS, probably the best and most inclusive of all tax-supported plans, has little or none, generally related to emergency dental care following injury. Probably more dental services are offered under the various Head Start programs than any others in the public sector.

Dental insurance is usually characterized by a healthy deductible which the patient must pay after which a 20 to 50 per cent co-pay obligation is incurred. Under such plans, the assured is lucky to recover as much as a fifth of his dental care expense. The dental service corporation is better, although it is essentially a postpayment program, usually through an employer group. Dental service corporations usually adjust rates on a one year experience basis. And 3 million out of 200 million Americans served is a tiny segment.

During the 1st Session of the 91st Congress, a bill was introduced to add dental care benefits under the CHAMPUS program for dependents of those on active duty and the retired military. While the bill was a stingy measure requiring as much as \$150 in patient-paid deductibles, it never got out of committee. Reason: Fear of costs.

The dental profession and organized dentistry are challenged to discover more about care costs, actuarial concepts in providing dental prepayment and insurance, and exactly how such benefits may best be offered to the care-consuming public from within the private sector. Perhaps the idea of a dental care foundation, patterned after the western medical care foundations, is an answer with promising potential.

In any event, the challenge is clear, and the opportunity for private dentistry to devise an initiative will never be better than it is today.—R.B.K.



"Put them all together and they spell mother."

Ingratitude and Calumny and Sen. Hughes

Francesco Guicciardini said during the 16th century that "ingratitude and calumny follow a good deed usually faster than gratitude and reward." Over 400 years later, the American Medical Association has a case in point proving the wise Italian correct.

Last March, AMA representatives testified in support of a bill by Sen. Harold E. Hughes (D., Iowa) which would have jurisdiction over drugs vested in a health agency of government rather than in the Department of Justice. In May, two months later, AMA presented testimony in support of a bill by Sen. Hughes on the treatment of alcoholism.

Recently, the mercurial senator, a liberal's liberal, was meeting with members of the American Alliance for Political Action which happens to be made up of militant students. Sen. Hughes was quoted as having said to the group in a discussion of the nation's problems that "if the medical profession—one of the most conservative—says we are responsible, it could have an effect on people."

Having warned the students, the senator ex-

horted them to begin political lobbying "by taking the American Medical Association on."

Now, this utterance can hardly be described as astonishing, coming from Sen. Hughes. What is astonishing is that he did not toss in a few adjectives just to make sure that nobody misunderstood the posture of these right-wing doctors. But the ingratitude and calumny of the whole thing is the senator's omission of AMA's support of two pieces of legislation which he had proposed. In the light of the exhortation to the militant students, it can only be reasoned that the omission was deliberate.

Of course, the medical profession did not offer its support of the two legislative proposals to appease or curry favor with Sen. Hughes. AMA speaks out on legislation only because it seeks the best interests of the nation's health. But the senator might have had the grace to acknowledge the action.

It is interesting to note that AMA has found reason to support many positions for which liberals as well as conservatives stand: Increases in the nation's medical manpower, more and better training programs for allied professional personnel, Medigap and the principle of a pluralistic care delivery system, research, and a host of measures intended to improve and expand care in the United States.

—The lowest priced tetracycline—nystatin combination available—



All of this seems to point in a single direction and clarify an unmistakable perspective: Men of Sen. Hughes' inclinations are inflexible in their antiestablishment aims, and their actions contradict anybody's definition of liberalism. If being conservative means reluctance to toss the system out the window when it has served us well, then we are conservatives. Meanwhile, color Sen. Hughes ungrateful.—R.B.K.

Button Power, Teenage Style

A group of Salt Lake City teenagers are making a success out of a button-making campaign. Only they are a little different: Instead of antiwar, antiestablishment, and antieverything buttons, these youngsters are giving each other some good advice with a smile.

To date, they have produced buttons in three campaigns, "Battle Booze," "Ban the Butt," and "Dump Drugs." On drinking, they have these messages: "Drinking Pays—the Distillers, the Hospitals, and the Junkyards." Another antibooze button proclaims "Drinkers Have Everything: Halitosis, Cirrhosis, and Psychosis." A third one admonishes "Support Your Local Sheriff—Drink." Tobacco brings out the grim side of the teeners' thinking with "Little Orphan Annie's Parents Smoked." Another proclaims that "The Family That Smokes Together Chokes Together." On drugs, "Don't Meth Around" and "Speed Kills."

This is one teenage demonstration against social practices which is to be encouraged and supported. The tragic permissiveness of society may finally be most effectively reversed by those for whom its benefits were mistakenly intended. The bad angle, however, is that too few realize the mistake in time. More button power like this to the teenagers.—R.B.K.



FUTURE CALENDAR

September 22, 1970

CIRCUIT COURSE, TUPELO

October 13

CIRCUIT COURSE, McCOMB

October 20

CIRCUIT COURSE, TUPELO

CIRCUIT COURSE, NATCHEZ

October 22

CIRCUIT COURSE, GREENVILLE

October 29

CIRCUIT COURSE, GREENVILLE

November 4

PULMONARY SEMINAR (TENTATIVE DATE)

November 5

CIRCUIT COURSE, GREENVILLE

November 17

CIRCUIT COURSE, TUPELO

November 24

CIRCUIT COURSE, COLUMBUS

December 11

GYNECOLOGIC AND OBSTETRICAL
INFECTIONS SEMINAR

January 7, 1971

CIRCUIT COURSE, HATTIESBURG

January 12

CIRCUIT COURSE, McCOMB

February 4

CIRCUIT COURSE, HATTIESBURG

February 16

CIRCUIT COURSE, NATCHEZ

February 23

CIRCUIT COURSE, COLUMBUS

March 2

CIRCUIT COURSE, MERIDIAN

March 4

CIRCUIT COURSE, HATTIESBURG

April 6

CIRCUIT COURSE, MERIDIAN

April 13

CIRCUIT COURSE, McCOMB

April 20

CIRCUIT COURSE, NATCHEZ

April 27

CIRCUIT COURSE, COLUMBUS

May 3-6

MISSISSIPPI STATE MEDICAL ASSOCIATION

May 11

CIRCUIT COURSE, MERIDIAN



PERSONALS

JOHN K. ABIDE of Cleveland announces the association of PERRIN N. SMITH in the practice of obstetrics and gynecology at 801 First Street.

S. LAMAR BAILEY of Kosciusko announces the association of his son, JAMES W. BAILEY, for the practice of general medicine and surgery at Bailey's Clinic, Hwy. 12.

DAVID A. BALL has joined the medical staff at Batesville Hospital as a general practitioner. Dr. Ball, a graduate of the University of Mississippi School of Medicine, has recently returned from a year's tour of duty in Vietnam with the U. S. Air Force.

JIM BARNETT of Brookhaven announces the association of JERRY LINGLE in the general practice of medicine and surgery at 222 South Church.

HUGH P. BOSWELL, JR., a native of New Albany, has assumed the position of hospital-based pathologist and director of the department of pathology at the Northeast Mississippi Hospital in Booneville.

R. E. CALDWELL and W. E. CALDWELL of Baldwyn announce the association of VERNON A. CHASE in the general practice of medicine. The Baldwyn Medical Group is located on Hwy. 45 South at Mill Street.

DAVID K. CARTER is now associated with the Watkins Clinic in Quitman. Dr. Carter, a recent graduate of the University of Mississippi School of Medicine, will practice general medicine.

S. B. CARUTHERS of Grenada has been awarded a special certificate of appreciation from the President of the United States for his loyal and faithful service as Medical Advisor to Local Board 23, Grenada.

JAMES R. CAVETT, JR., of Jackson has been appointed medical director for Lamar Life Insurance Company.

DAVID L. CLIPPINGER, formerly of Hazlehurst, announces the relocation of his practice at 743 16th Street in Gulfport in the Mississippi City Shopping Center.

JOHN ROBERT DAVIS of Corinth has joined the Davis Clinic on Childs Street. Dr. Davis limits his practice to internal medicine with emphasis in gastroenterology.

EARL W. GREEN, EMMETT HERRING, and JOHN E. GREEN of Hattiesburg announce the association of MILAM S. COTTEN for the practice of ophthalmology at the Green Eye Clinic, 705 Hall Avenue.

HENRY HOLLEMAN of Columbus has been named chief of staff at Lowndes General Hospital. FRANK BAIRD was elevated from secretary to vice chairman and WILLIAM C. GATES, JR., was named secretary of the staff.

W. N. JENKINS of Port Gibson was honored with a reception at Claiborne County Hospital for his having served a half-century in the medical profession. He was also elected to the MSMA Fifty Year Club.

EARL L. LAIRD of Meridian has been appointed by Governor John Bell Williams to the State Banking Board as a member from the state-at-large for a term expiring May 1, 1974.

WOODROW LAMB, recently of Greenwood, has been appointed director of the Coahoma County Health Department at Clarksdale. He was formerly clinician for a five-county district.

A. EUGENE LEE of Oxford is the first Mississippian to be admitted as a Fellow of the American College of Legal Medicine. There are now 142 Fellows in the organization which requires graduation both from accredited medical and law schools.

THOMAS D. LITTLE announces the opening of his office for the practice of orthopedic surgery at 1103 21st Avenue, Meridian.

WILLIAM R. LOCKWOOD of Jackson has been named to the dual position of Jackson Veterans' Administration Center associate chief of staff of research and University of Mississippi Medical School assistant dean for coordination of research at the V.A. Center.

C. FOSTER LOWE announces the opening of his office at the Surgical Clinic, 620 Delaware Avenue in McComb. Dr. Lowe limits his practice to general surgery.

J. O. MANNING of Jackson is serving as president of the Hinds County chapter of the Ole Miss Alumni Association.

FRANK J. MORGAN, JR., of Jackson, and assistant State Health Officer, has been promoted to the rank of captain in the Medical Corps of the U. S. Navy Reserve, back dated to August 1969.

Menrium[®] treats
the menopausal
symptoms
that bother him
most.



His wife has a lot of different menopausal symptoms, but only a few really irritate him. Her hot flashes, her vertigo, her palpitations—that's her problem. What really bothers him is her nervousness, her irritability and her excessive anxiety, often expressed as endless "book-shuffling, chain-smoking, reading-lamp" insomnia! Menrium takes care of hot flashes, vertigo, palpitations in most menopausal women. Menrium provides the well-known antianxiety action of chlordiazepoxide (Librium®) and water-soluble esterified estrogens. Therefore it relieves more symptoms than either component separately. Menrium takes care of the vasomotor symptoms as well as the emotional symptoms. This means the symptoms that bother his wife most. And the symptoms that irritate him most. So, to help them both get through menopause, remember Menrium.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of manifestations generally associated with the menopausal syndrome—anxiety and tension, vasomotor complaints and hormonal deficiency states.

Contraindications: Women with cancer of breast or genitalia, except inoperable cases, and those with known hypersensitivity to chlordiazepoxide and/or esterified estrogens.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Exclude other possible causes of menopausal syndrome manifestations, such as pregnancy. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) similar to those seen with barbiturates have been reported following discontinuance of chlordiazepoxide HCl. Potential benefits of use in pregnancy, lactation or women of childbearing age should be weighed against possible hazards to mother and child. Clinical data inadequate on safety in pregnancy.

Precautions: In elderly and debilitated patients, limit dosage to smallest effective amount of chlordiazepoxide (initially 10 mg or less per day) to preclude ataxia or oversedation; increase gradually as needed and tolerated. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects—particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in patients with impaired renal or hepatic function. Paradoxical reactions to chlordiazepoxide (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in the treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation very rarely reported in patients receiving Librium® (chlordiazepoxide) and oral anticoagulants.

Adverse Reactions: Untoward effects seen with either compound alone may occur with Menrium. With chlordiazepoxide, drowsiness, ataxia and confusion reported in some patients, particularly in the elderly and debilitated; while usually avoided by proper dosage adjustment, these are occasionally observed at lower dosage ranges. Also reported have been a few instances of syncope; isolated occurrences of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido, and occasional reports of blood dyscrasias, including agranulocytosis, jaundice and hepatic dysfunction. Periodic blood counts and liver function tests advisable during protracted treatment. Changes in EEG patterns (low-voltage fast activity) observed during and after chlordiazepoxide treatment.

With estrogens, headache, nausea and vomiting, anorexia, gastrointestinal discomfort, dysuria and urinary frequency, jitteriness, breast engorgement, formation of breast cysts, skin rashes and pruritus occasionally seen. Administration may also be associated with uterine bleeding and/or followed by withdrawal bleeding.

Usual Dosage: One tablet t.i.d. for 21 days, followed by one-week rest periods.

Menrium® T.I.D.

5 mg chlordiazepoxide

5-2

0.2 mg water-soluble esterified estrogens

5 mg chlordiazepoxide

5-4

0.4 mg water-soluble esterified estrogens

10 mg chlordiazepoxide

10-4

0.4 mg water-soluble esterified estrogens

PERSONALS / Continued

WREN R. NEALY, formerly of Pascagoula, announces the relocating of his office to 1251 Lancaster Drive, Salem, Ore.

J. ELMER NIX of Jackson announces the association of SIDNEY R. BERRY for the practice of orthopedic surgery at Suite 408, Medical Arts Building.

JOE ROBERT NORMAN of Jackson has been named professor of medicine and Christmas Seal professor of respiratory disease at the University Medical Center.

WILLIAM B. PROFILET, JR., has associated with the Medical Clinic at 153 E. Center Street in Canton. Dr. Profilet will practice general medicine and surgery.

LAMAR PURYEAR, JR., of Hazlehurst has been promoted from the rank of colonel in the Mississippi National Guard to Brigadier General. Dr. Puryear has 29 years of military service in the guard.

WILLIAM H. ROSENBLATT of Jackson is directing a series of six short courses, "Introduction to Cardiac Nursing," at Mississippi Baptist Hospital.

HENRY D. SANTINA and ELIZABETH HOLLINGSWORTH of Columbus have announced that BEN F. MARTIN has assumed the direction of the laboratory at Lowndes General Hospital and at Columbus Pathology Laboratory.

EDSEL F. STEWART of McComb has been awarded the Physician's Recognition Award for excellence in the profession of medicine for fulfilling requirements in continuing medical education by the American Medical Association.

WENDELL H. STOCKTON of Amory has been elected to fellowship in the American Academy of Pediatrics.

The Children's Clinic, 876 A Lakeland Drive in Jackson, announces the association of ROBERT H. THOMPSON, JR., for the practice of pediatrics.

CLIFFORD TILLMAN of Natchez has been appointed chairman of the MHA Intensive Cardiac Care Committee for this area of the state. G. SPENCER BARNES of Columbus, president of the Mississippi Heart Association, made the announcement.

L. D. WEBB of Calhoun City, who is currently serving as mayor, was honored recently by the

Chamber of Commerce for outstanding service to the town. He was presented a plaque at the Chamber banquet.

DAVID B. WILSON of Jackson has accepted a one-year consultantship in health services planning with the Coordinator of Health Services, Office of the Governor, State of Illinois. He will be working out of Chicago.

W. B. WINSTEAD of Pascagoula has been appointed to the emergency room physician staff at Singing River Hospital.



NEW MEMBERS

COLLINS, TED ZANNY, Columbus. Born Jonesville, La., Jan. 29, 1931; M.D. Louisiana State University School of Medicine, New Orleans, La., 1965; Interned Charity Hospital, New Orleans, La., one year; Urology residency, same, four months; radiology residency, same, Nov. 1966-Oct. 1969; elected July 1970, Prairie Medical Society.

KOBS, DARCEY GUS, JR., Hattiesburg. Born Galveston, Texas, April 4, 1939; M.D. University of Texas Medical Branch, Galveston, Texas, 1965; Interned University of Texas Medical Branch Hospital, Galveston, Texas, one year; radiology residency, same, six months; radiology residency, Denver General Hospital, Denver, Colo., March 16, 1967-Sept. 15, 1969; elected June 1970, by South Mississippi Medical Society.

MITCHELL, LARRY MORRIS, Jackson. Born Magee, Miss., Jan. 27, 1935; M.D. University of Mississippi School of Medicine, Jackson, Miss., 1963; Interned University of Cincinnati, Cincinnati, Ohio, one year; internal medicine residency, University Medical Center, Jackson, Miss., July 1964-June 1967; elected May 1970, by Central Medical Society.

RICHARDSON, TRAVIS QUITMAN, Ruleville. Born Aug. 15, 1933, Doddsville, Miss.; M.D. Tulane University School of Medicine, New Orleans, La., 1969; Interned St. Joseph Hospital, Houston, Texas, one year; elected April 1970, by Delta Medical Society.



Book Reviews

Cardiac Arrest and Resuscitation. By Hugh E. Stephenson, Jr., M.D., F.A.C.S. 500 pages with 223 illustrations. St. Louis: The C. V. Mosby Co., 1969. \$29.50.

This is the third edition of this book, previous editions having been presented in 1958-64.

This is an attempt to present in one volume the current total picture of the problems dealing with cardiopulmonary resuscitation.

His list of references is most adequate. It amply demonstrates the thoroughness with which this volume has been presented.

The historical aspect of cardiac arrest and resuscitation is gone into with detail and is not only informative but extremely interesting. I would recommend this not only to physicians but to nurses and paramedical personnel who are confronted with this problem. This is particularly true for personnel who are involved with ambulance driving, helicopter teams and most especially personnel working with intensive care and coronary care units. The chapter on recognition of cardiac arrest is of particular interest to these groups. The methods of diagnosing, treating and monitoring are presented in this chapter. Also the following chapter is very explicit on the techniques of cardiopulmonary resuscitation.

The volume seems to be complete in its presentation. Despite its detail and thoroughness the book is most pleasant reading. Not only would it be an excellent reference book, but it should be handy for all physicians who are dealing with this particular problem. This book would be of special interest to anesthesiologists, cardiologists and cardiac surgeons. I think it would be a must for a medical school library and would feel that medical students should be familiar with this information.

Chapter 50 deals with a very important subject, the medical-legal aspects of cardiac arrest and resuscitation, which is often omitted in other volumes.

In summary, the authors have presented in

one volume in a comprehensive manner the major problems dealing with cardiac arrest and resuscitation along with problems leading to it and with its long term followup. I think this would be a valuable adjunct to any medical library.

HENRY B. TYLER, M.D.

Handbook of Legal Medicine. By Alan R. Moritz, M.D., and R. Crawford Morris, LL.B. 238 pages. St. Louis: The C. V. Mosby Co., 1970. \$8.75.

The *Handbook* has appeared in its third edition with two notable improvements: It is small and concise, almost abbreviated, and it is almost as up-to-date as the daily newspaper. For those who have used the splendid predecessor book, *Doctor and Patient and the Law*, in which one of the present authors, Dr. Moritz, collaborated with C. Joseph Stetler, LL.B., J.D., the new *Handbook* covers familiar subjects with a new and useful approach.

The work is divided into two major parts. The first is medicolegal and a synopsis of forensic pathology. In the brief but highly informative chapters on death by violence, fixing time of death, rape, abortion, battered child syndrome, and associated subject areas, the physician-reader will find elemental information which he already knows. The attorney will benefit from these thumbnail sketches. And both will be given useful references, often, with cases in point by citation.

By far, the most useful portion to the practicing physician is the second division of the work which runs the gamut of medicolegal aspects of practice-encountered situations. An example of the currency of the book may be found in the brief chapter on abortion where the authors summarize actions of state legislatures in liberalizing laws, including the "on demand" statutes enacted in Alaska, Hawaii, and New York. The pending case, *United States of America v. Vuitch*, expected by many legal observers to be the pivotal decision in the fall term of the U. S. Supreme Court in this area, is cited.

The second section on physician and patient

and on the physician and the law lacks the detail and elaboration found in the 1962 work by Moritz and Stetler, yet its conciseness and brevity do not impair its usefulness. The physician can secure information quickly from these chapters and then properly seek guidance and advice from legal counsel which should be the case.

In addition to definitive information on consent, negligence, legal insanity, liability, and the whole spectrum of circumstances likely to arise in medical practice, the authors have included pertinent reference information on statutes of limitations, narcotics regulations, and workmen's compensation.

A most useful glossary of medicolegal terminology precedes the index. Citations of cases in point have been reduced to a bare minimum, and perhaps the work might be enhanced by inclusion of additional citations for ready reference by attorneys. The book is printed on soft ivory English-finish paper of high quality and attractively bound. It is recommended as a useful reference to practicing physicians.

ROWLAND B. KENNEDY

New Books Received

The Adolescent Patient. By William A. Daniel, Jr., M.D. 444 pages with 76 illustrations. St. Louis: The C. V. Mosby Company, 1970. \$20.50.

Spectroscopic Approaches to Biomolecular Conformation. Edited by D. W. Urry. 314 pages. Chicago: The American Medical Association, 1970. \$15.00.

The Tetralogy of Fallot From a Surgical Viewpoint. By John W. Kirklin, M.D., and Robert B. Karp, M.D. 189 pages with 88 illustrations. Philadelphia: W. B. Saunders Company, 1970. \$13.00.

Healthful School Environment. By Charles C. Wilson, M.D., and Elizabeth Avery Wilson, Ph.D. 296 pages. Washington, D. C.: The National Education Association and the American Medical Association, 1969. \$6.00.

Emergency Treatment and Management. 4th Edition. By Thomas Flint, Jr., M.D., and Harvey D. Cain, M.D. 733 pages with 22 illustrations. Philadelphia: W. B. Saunders Company, 1970. \$11.50.



DEATHS

GRANT, ROY GILMER, M.D., University of Virginia School of Medicine 1919; Interned Orange Memorial Hospital, Orange, N. J., one year; died July 17, 1970, age 77.

Microbiologist Studies Sterility Evaluation

A leading microbiologist has unveiled promising new concepts for sterility evaluation. Armand Marinaro, chairman of the Sterility Subcommittee of the Health Industries Association's Sterile Disposable Device Committee and assistant to the director of Technical Assurance and Services at Johnson & Johnson Company, outlined newer procedures recently at the 70th Annual Meeting of the American Society for Microbiology in Boston.

"The use of a sterility test by itself is inadequate . . .," Marinaro points out. "Other factors must be introduced to maintain a successful sterility program." The microbiologist says more than one agent, and several methods of procedure must be used together or in succession.

Marinaro's approach includes the use of purposely inoculated samples placed at pre-determined locations throughout the lot or batch. This is done once the exact method of sterilization has been selected. During this phase of exploration, Marinaro finds the microorganism that is most resistant to the conditions of the sterilizing process to be used. This microorganism then becomes a measuring tool against which the microbiologist can measure his test using relatively few samples.

Marinaro does not permit the control procedure to become static. He constantly attempts to find microorganisms that are more resistant than those being used. These control microorganisms are placed at strategic locations in the batch, and the entire sample is then subjected to a standard sterility test as outlined in the current U.S.P.

Complete copies of Marinaro's presentation have been made available through the HIA's Sterile Disposable Device Committee office. Copies are available at \$5.00 each by writing to HIA/SDDC, Suite 314, 1225 Connecticut Avenue, N. W., Washington, D. C. 20036.



New Membership Service Will Itemize Dues and Offer Tax Deduction Records

A new membership service will be initiated in October to make dues payment easy for members and component medical societies. The service was authorized by the House of Delegates at the May 1970 annual session and ordered implemented by the Board of Trustees.

Drs. Paul B. Brumby of Lexington, association president, and Mal S. Riddell, Jr., of Winona, Board chairman, said that many benefits will accrue in the new service, including furnishing of itemized statements to members for all payments, complete records to local society secretaries, and greater convenience for all.

"Much thought and planning have gone into this new program," Drs. Brumby and Riddell said. "It is a maximum-accuracy and maximum-convenience program with complete records for the individual physician and his local medical society furnished."

Billing statements will be prepared and mailed from the state medical association's Jackson executive office, the announcement stated. Even a postage-paid return envelope will be furnished for the convenience of members.

The statement will list in detail both amounts to be paid and exact identification of each. These include local, state, and AMA dues, all of which are fully deductible for income tax purposes.

Also included for physicians' convenience will be items for MPAC (Mississippi Medical Political Action Committee) and AMPAC (American Medical Political Action Committee) dues. These amounts, \$10 each for 1971, are voluntary and nondeductible for tax purposes. The reason is that these are used for direct political action purposes in behalf of medical organization.

Statements will contain a reminder for AMA-ERF (American Medical Association Education and Research Foundation) gifts, which are voluntary and fully tax deductible. Members may earmark their AMA-ERF gifts for the medical school of their choice, if desired.

No part of PAC dues or AMA-ERF gifts go for administrative or collections costs. These are jointly borne by the organizations which are to-

tally and completely separate from the state medical association and AMA.

The detailed, itemized statements, fully acceptable for income tax records, will be mailed about Oct. 15, according to Dr. Raymond S. Martin, Jr., of Jackson, association secretary-treasurer. Each mailing will also carry a postage-paid return envelope for the convenience of the remitting member.

The state executive staff will process dues and gift returns on a daily basis, making complete reports to the members' local societies, PAC organizations, AMA, and to the AMA-ERF. The service is expected to relieve local society secretaries of time-consuming tasks and improve records at their disposal.

Early collections will also establish income tax deductions, both with the itemized documentation and cancelled check.

Drs. Brumby, Riddell, and Martin appealed to members to respond promptly to billings for their own benefit as well as for local societies and the state medical association.

"We plan to perform this service for the members and their societies without charge and without adding a single additional staff member in the executive office," the association leaders said.

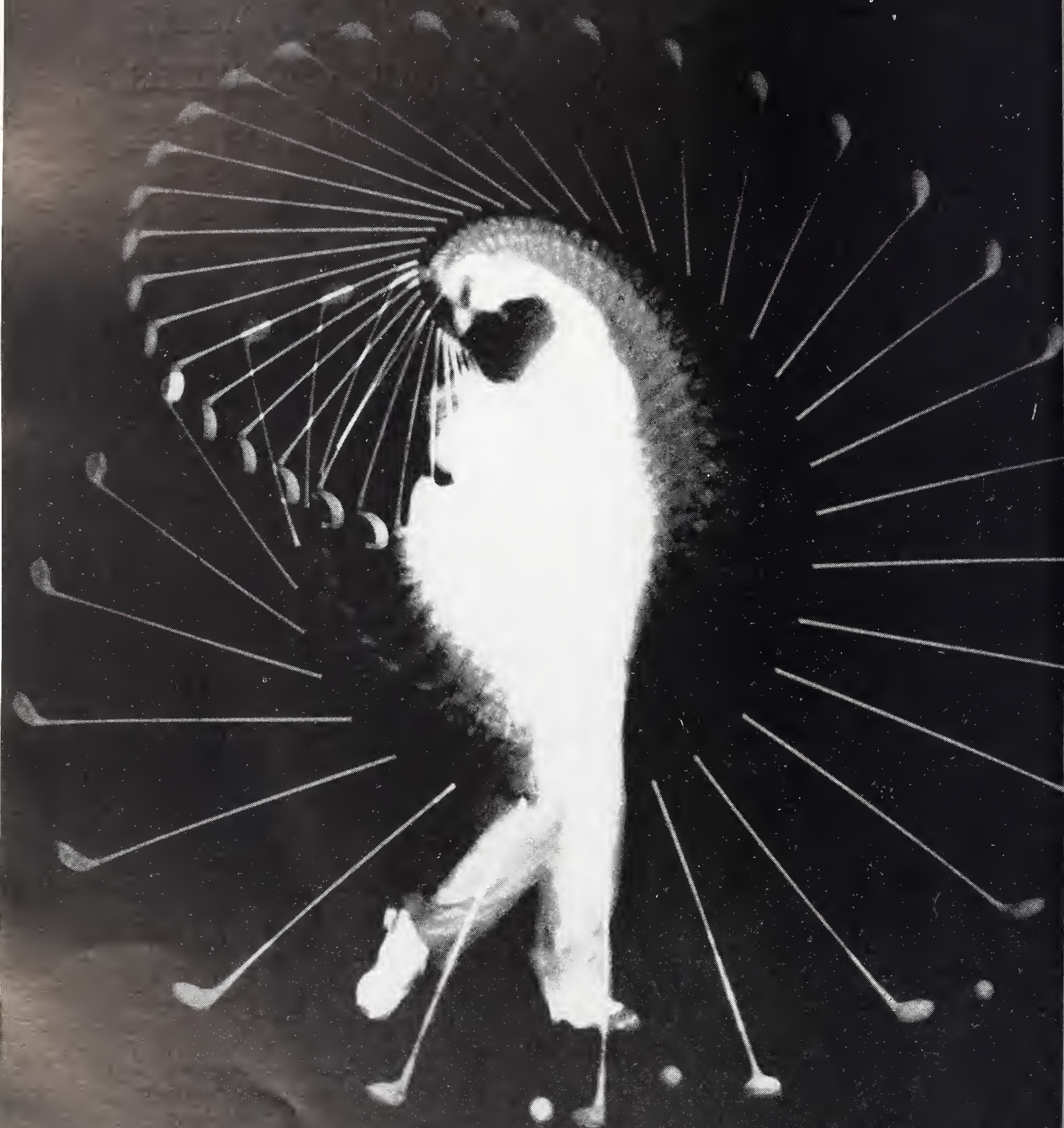
"To do this, we need to get this task behind us before the end of the year, because we will need maximum staff services for the new and expanded legislative program and the annual session of the legislature," they added.

Members who are exempt from dues, including Emeritus members and those in residencies or the military service, will not be billed. They will receive their membership cards after certification by the local society.

The entire service is under control of the local societies which will approve each billing before it is made.

New members will submit application forms and their checks to local secretaries as before. The program has been well-received, officials said, and it is expected to increase efficient operations, offer convenience and better records to members, and assist local societies.

What is worth doing.



In 1936 A. E. Smith, professional at Woolcombe, England, recorded the low golf score for an 18 hole course. He scored 55 and was 15 under par. The course at Woolcombe, which measured 4,248 yards, was covered in 4, 2, 3, 4, 2, 4, 3, 4, 3, 2, 3, 3, 3, 2, 5, 4, 1 in.

s worth doing well.

Take ACHROMYCIN V, for example. Lederle routinely runs over 1,000 quality control checks on every batch produced. Many, many more than officially required. This extra attention means your patients get what the doctor ordered when you prescribe ACHROMYCIN V: uniform *in vitro* dissolution rate, predictable *in vivo* serum and urinary levels. In short, known biologic availability of tetracycline. And every step in the production of ACHROMYCIN V is



in-house controlled right in Pearl River.

ACHROMYCIN-V[®] Tetracycline HCl

Performance proved in practice

Effectiveness: ACHROMYCIN tetracycline is a crystalline broad-spectrum antibiotic which provides effective therapeutic activity against susceptible microorganisms.

Contraindication: History of hypersensitivity to tetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. Some patients may develop a photodynamic reaction to natural or artificial sunlight. Those with a history of photosensitivity reactions should avoid direct exposure to sunlight while under treatment. Discontinue drug at first evidence of skin discomfort.

Precautions: Use may result in overgrowth of nonsusceptible organisms.

Constant observation is essential. If new infections appear, take appropriate measures. Use of tetracycline during teeth development may cause discoloration of teeth.

Side Effects: Gastrointestinal system— anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes (a case of exfoliative dermatitis has been reported); photosensitivity reaction, onycholysis and discoloration of nails (rare). Kidney— rise in BUN, apparently dose-related. Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. In young infants, bulging fontanels have been reported following full therapeutic dosage. This symptom has disappeared rapidly when drug is discontinued. Teeth —dental staining (yellow-brown) in children of mothers given tetracycline

during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. Blood—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. Liver—cholestasis (rare), usually at high dosage. Tetracycline may form a stable calcium complex in bone-forming tissue. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. **Average Adult Daily Dosage:** One Gm. per day, in 4 divided doses of 250 mg. each. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

Drug Abuse Exhibit Is Available

An exhibit on drug abuse may now be obtained on loan from Eli Lilly and Company by state, county, and local pharmaceutical and medical associations and by schools of pharmacy and medicine. The exhibit is designed for display at state or county fairs, health fairs, or other appropriate gatherings of the general public under the sponsorship of the association and/or school.

The eight-foot-long exhibit features an 11-minute slide-tape presentation entitled "Students Look at Drugs," in which six students describe the availability and use of drugs as they see them and offer suggestions for alleviating the problem.

Space is provided above the film screen for identification of the sponsoring organization. To the left of the exhibit is a storage compartment on the top of which handouts such as drug abuse educational material, health information pamphlets, or other literature may be placed for distribution to visitors.

A LaBelle tape cartridge deck is used with a carousel slide projector to advance the slides automatically and provide narration. The unit runs continuously.

Although relatively maintenance-free, the unit

is subject to failure, as with any piece of equipment containing moving parts. For this reason, any organization borrowing the exhibit should arrange to have someone on hand at all times during the show hours.

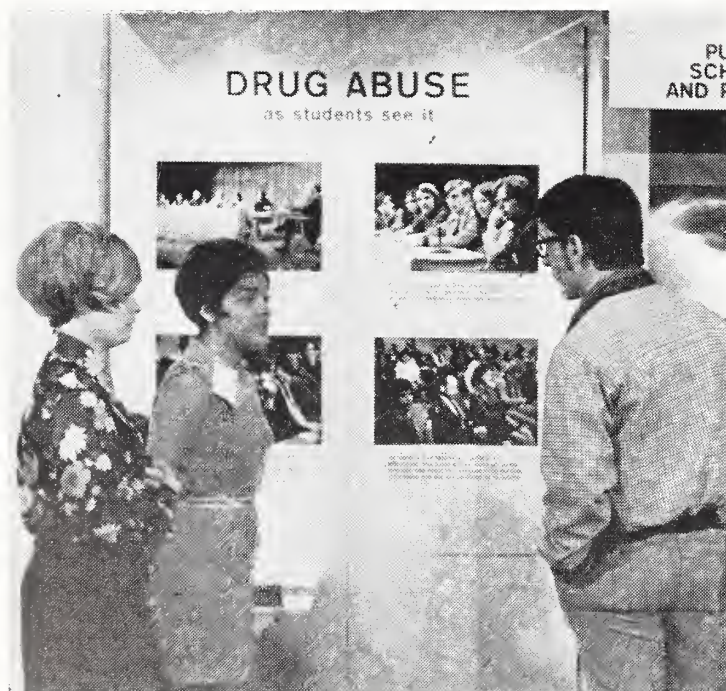
Eli Lilly and Company will pay shipping costs to the exhibit site and return to Indianapolis. Any cost involved in obtaining the exhibit space must be borne by the sponsoring organization.

A limited number of exhibits are now available for loan and may be obtained on a first-come, first-served basis.

The following information is required: (1) name and dates of the show, including set-up date; (2) the exact name of the sponsoring organization; (3) precise shipping instructions (e.g., street address, building name, booth number); and (4) the name and address of one individual who will assume responsibility for setting up the exhibit, seeing that it is properly manned during show hours, and seeing that the exhibit is dismantled, repacked, and returned promptly to Indianapolis. Note: Two men are required to set up the exhibit as well as dismantle it. Instructions accompany the exhibit.

One to three weeks are required to ship to location, depending on the distance from Indianapolis.

Requests should be addressed to Eli Lilly and Company, marked for the attention of the Professional Relations and Services Department, M-501, Indianapolis, Indiana 46206.



Three teenagers discuss the Eli Lilly Exhibit on drug abuse. This exhibit is now available to professionals and medical organizations.

ACP Presents Internal Medicine Course

The American College of Physicians will present a postgraduate seminar on basic mechanisms in internal medicine Oct. 5-9, 1970, at the Medical College of Virginia at Richmond.

Dr. W. T. Thompson, Jr. is director. Co-directors are Drs. Charles M. Caravati and Kinloch Nelson. The minimum number of registrants is 100 and the course is limited to 200.

The purpose of this course is to present new and significant advances in internal medicine with emphasis on basic mechanisms and patho-physiologic concepts as they relate to clinical manifestations and to therapy of disease.

Line of Microsurgical Instruments Introduced

An extensive line of new interchangeable microsurgical instruments, designed for use in the fields of neurosurgery, eye surgery and the microscopic sciences, is now available from Circon Corporation, Goleta, Calif.



The Circon microsurgical instruments are compared in size to a dime.

Termed "Circon MicroSurgical," the new line consists of 23 micro scalpels, needles and manipulators . . . including three tips which have not been available even in larger size instruments. One of these is a Tungsten Ultra MicroNeedle having a 6 micron radius at the point. Another is a unique Guarded MicroHook which allows withdrawal of material through a membrane without danger of the membrane being caught on the hook. Still another, Circon's MicroSurgical MicroScale is graduated in 50 micron divisions and permits visual or photographic measurements.

The unique features of the new microsurgical instrument line are the ultra micro size of the working tips, the wide range of tip designs and the option of having interchangeable tips ground onto a variety of shaft configurations. A choice of two delicately balanced handles, designed specifically for precision work under the microscope, extends the choice of combinations even further. Each of the 23 tips may be ordered on any of

the 13 shafts and mounted on either handle to comprise a total of 598 different instruments.

The complete line of working tips includes micro needles, micro hooks, micro forks, micro retractors, micro knives, micro lances, micro chisels, micro saws, micro spoons, micro spatulas, micro loops, micro brushes and the micro scale. A choice of 13 shafts (in 9, 6 or 3 cm. lengths) and two stainless steel handles (tapered or straight) are also available for any tip configuration. Handles feature a hexagonal grip and are of a size and weight which have been found to be ideal for precision, long duration work under the microscope.

The new instruments are manufactured of the finest stainless steel and may be selected individually or combined in sets. Shafts with tips may be ordered with or without handles for use in micro manipulators.

For additional information, write Circon Corporation, Santa Barbara Airport, Goleta, Calif. 93017.

Meridian Gets Mental Health Center

The Department of Health, Education and Welfare has approved a \$160,000 grant for the construction of the Weems Region 10 Complex in Meridian as a community mental health center serving Clarke, Jasper, Kemper, Lauderdale, Neshoba, Newton and Scott counties.

The center's application for \$273,000 for initial staffing of the center also was approved, but the Regional Commission has been informed that funding of the staffing grant will be delayed because insufficient federal funds are available at this time.

In its approval notification, the Region 10 program was commended by the National Institute of Mental Health for its "exceptionally innovative and progressive approach in the establishment of a mental health center."

Dr. Dorothy Moore, program director of the Mississippi Interagency Commission on Mental Illness and Mental Retardation, stated that it was difficult to predict how long the center's staffing funds will be delayed. While construction is in progress and prior to receipt of staffing funds, minimal services will be provided in the region by a small staff supported entirely by local funds.

Dr. William M. Wood will be psychiatrist-director of the new center program, and Dr. Reginald P. White is chairman of the Region 10 board of commissioners.

Many Use Yellow Pages

A recent Yellow Pages National Consumer Usage Study shows that 23.5 per cent of the total active market use the Yellow Pages to find pharmacies in a given year. They average 7 uses per person, totaling more than 141 million per year.

The study was based on extensive personal interviews conducted throughout the nation by Audits & Surveys Co., Inc., an independent research organization.

Seven out of ten adults in the United States or 47,181,000 women—74 per cent of all 20 years old and older—and 38,480,000 men—69 per cent of the total, are in the market for pharmacy products or services each year.

The study also shows that the more adults in a household, the more likely they are to seek

pharmacies. Three-fourths of those in households with five or more adults are in the market, compared with 70 per cent of those in households with one to four adults.

Also, 74 per cent of adults in metropolitan areas seek pharmacy products or services, compared with 68 per cent of those who live in non-metro areas.

Overall, 71 per cent are for personal reasons, 29 per cent are for business use. However, women's uses are reported to be 36 per cent for business reasons, 64 per cent personal, while men's uses run 90 per cent personal, 10 per cent for business.

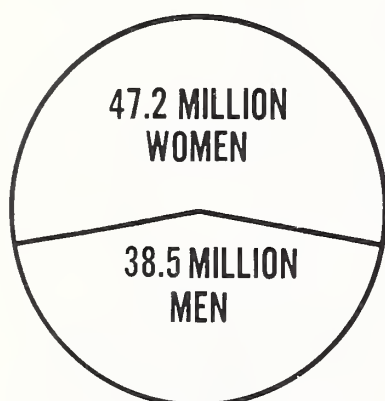
Significantly, 37 per cent of all references are made without the name of a pharmacy in mind.

In terms of income, 28 per cent of those with incomes of \$10,000 and over use the directory, compared with 25 per cent of those in the \$5,000-\$10,000 category, and 15 per cent of those with family incomes of \$5,000 and less.

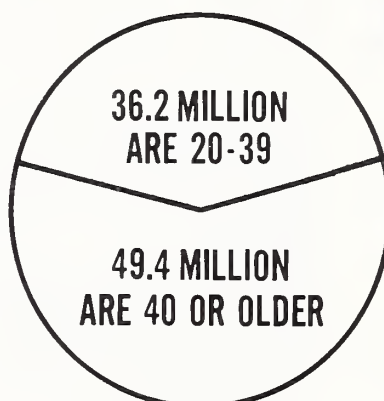
Also, new residents tend to use the Yellow Pages considerably more than would be indicated

THE ACTIVE MARKET FOR PHARMACIES

More than 85.6 million of the nation's 119.8 million men and women (20 and older) annually are in the market for Pharmacy Products and Services.



SEX



AGE

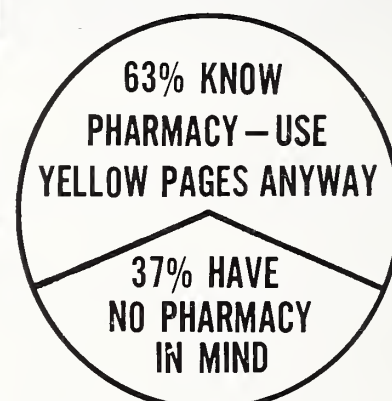


FAMILY INCOME

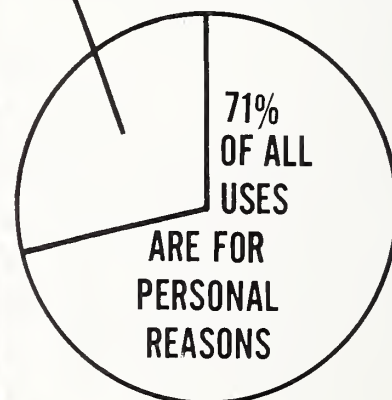


NEW-OLD RESIDENTS

23.5%—over 20 million people—use the Yellow Pages to find Pharmacies.



29% ARE FOR BUSINESS REASONS



AVERAGE
7 USES
PER PERSON

141 MILLION REFERENCES

94%

ARE FOLLOWED
UP WITH A



PHONE CALL



...VISIT



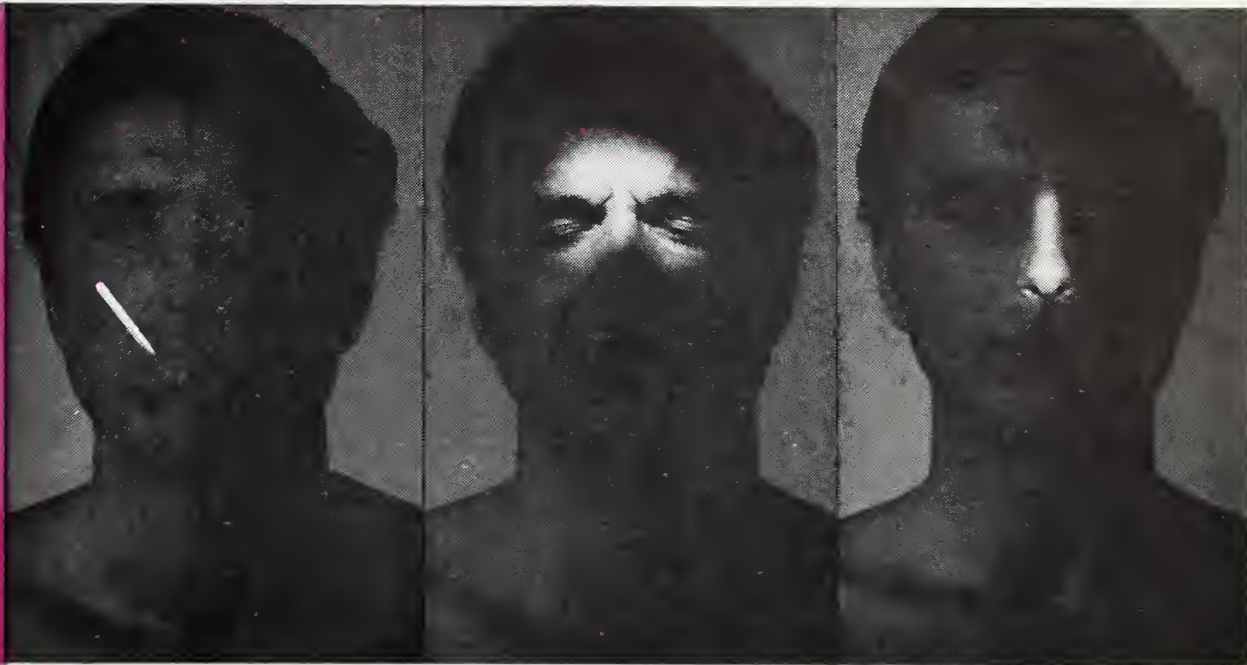
OR LETTER

Source: 1970 Yellow Pages National Consumer Usage Study

Table 1

'Group' therapy

for the bacterial complications of flu/U.R.I. and related symptoms



Infection

A broad-spectrum antibiotic to combat susceptible bacterial infections

Fever

An analgesic/antipyretic to bring down fever, ease pain, and malaise

Pain

Congestion

An antihistamine for the symptomatic relief of nasal congestion

Tetrex[®] APC

with Bristamin[®]

(tetracycline phosphate complex with analgesics and antihistamine)

For complete information consult Official Package Circular. (5) 4/2/70.

Indications: Upper respiratory infections due to sensitive bacteria where concomitant symptomatic relief of fever, malaise and congestion is desired.

Contraindications: Hypersensitivity to one or more components.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural or artificial sunlight should be avoided during therapy. Stop treatment if discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary

during prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). **Precautions:** Antihistamines may cause drowsiness and patients should not perform tasks requiring mental alertness while taking this agent. Bacterial or mycotic superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for a

minimum of 4 months.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis and allergic reactions may occur.

Usual Adult Dose: 2 capsules q.i.d. Children 6 to 12 years of age: ½ the adult dose.

Continue therapy for at least ten days in Group A beta-hemolytic streptococcal infections. Administer 1 hour before or 2 hours after meals.

Supplied: Capsules—in bottles of 24 and 100.

A.H.F.S. Category 8:12

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Co.
Syracuse, New York 13201

by their proportionate share of the market. Thirty-one per cent of those who have lived in their homes two years or less go to the Yellow Pages to find pharmacies, compared to 21 per cent of longer-term residents.

Renters, too, are more likely to use the Yellow Pages, with 25 per cent seeking pharmacies in this manner, compared with 23 per cent of homeowners.

Of those who are in the market, metropolitan area residents also are most likely to use the Yellow Pages, with 25 per cent doing so, compared with 21 per cent of those who live in non-metro areas.

Young adults tend to use the directory to find pharmacies to a greater extent than older people, 30 per cent of those in the 20-39 age group do so, compared with 19 per cent of those over 40.

The study is said to be the most specific ever conducted on consumer use of the directory. Nationally, it found that 76.8 per cent of the adult population refer to the Yellow Pages annually to find suppliers of all products and services.

Five-Day Course Set For Internists

The American College of Physicians (ACP) will sponsor a five-day postgraduate course on "Advances in Internal Medicine" Sept. 14-18 in San Francisco.

The course will be held at the Department of Medicine of the University of California San Francisco Medical Center. It is one of 25 formal and in-depth postgraduate courses the College is conducting in the United States, Canada and Mexico during the academic year 1970-71. Each course is designed to help specialists keep abreast of new knowledge in the prevention, diagnosis and treatment of disease.

The San Francisco course will be a review of selected areas of special interest to internists. Included will be course material on advances in cardiology, gastroenterology, pulmonary disease, endocrinology and metabolic diseases, kidney disorders, rheumatic diseases and drug therapy.

Dr. Marvin H. Sleisinger, San Francisco, Professor of Medicine at the San Francisco Medical Center, is course director. The faculty will be drawn largely from the university medical school.

For registrations and applications write Dr. Edward C. Rosenow, Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

Snively Medical Library Dedicated



Contributions from former students, colleagues and patients of the late Dr. J. Robert Snively have established a library in his memory in the University of Mississippi School of Medicine Department of Medicine. The noted physician-educator was first medicine chairman at the Medical Center and served in that capacity until his death in 1964. Talking with Mrs. Snively at the reception which followed the library dedication are three former students of Dr. Snively: Dr. Robert E. Tyson of Jackson, left; medicine assistant professor Dr. Walter Treadwell, second left; and medicine resident Dr. Cecil Williams, right. Future gifts to the Snively fund will be used to expand the collection.

UMC Trains Medical Record Librarians

Mississippi's first baccalaureate degree program for medical record librarians gets underway this fall at the University Medical Center.

Approved by the Board of Trustees in May, the program extends and restructures the UMC certificate training course in operation since 1959.

Candidates for the bachelor's degree in medical records must now acquire three-years' credit toward their degree at an affiliated college or university which will grant the degree on completion of the 11-month Medical Center course. Applicants who already hold a bachelor's degree must have had the necessary liberal arts courses outlined in the curriculum.

Coordinated through the UMC Office of Allied Health Professions, the program was changed to the baccalaureate level in keeping with the University's educational goals and the American Medical Record Association's registry requirements.

Field Hospital Gets Lifeguard System

The Field Memorial Community Hospital in Centreville recently equipped two rooms with a Modular Lifeguard System, according to Earl DuBose, administrator.

The lifeguard system is designed for the care of acute coronary patients and for monitoring other critically ill patients.

The system provides continuous monitoring of both rooms on a central monitor located at the nurses' station. Each patient's ECG and heart rate is presented on an oscilloscope and a separate rate meter so that at a glance the nurse can tell the heart rate of each patient.

The attending physician may observe the patients' ECGs on the oscilloscope either at the nursing station or on the oscilloscope located in the patient's room.

ACP Plans Kidney Disease Course

The American College of Physicians (ACP) will sponsor a three-day postgraduate course on "Renal Diseases: Pathophysiology, Diagnosis and Management" Sept. 9-11 in Rochester, Minn.

The course will be held at the Mayo Graduate School of Medicine, University of Minnesota and the Mayo Clinic for specialists in internal medicine and related specialties. It is one of 25 formal and in-depth postgraduate courses the College is conducting in the United States, Canada and Mexico during the academic year 1970-71. Each course is designed to help specialists keep abreast of new knowledge in the prevention, diagnosis and treatment of disease.

The Rochester course is designed to help internists with practical problems in diagnosing and treating kidney diseases and to help them achieve a better understanding of the disease pathology. Subjects to be covered will include high blood pressure and its relation to kidney diseases, kidney stones, glomerular disease and infections of the urinary tract.

Dr. James C. Hunt, Rochester, Chairman of the Division and Consultant in Nephrology and Internal Medicine at the Mayo Clinic and Professor of Medicine at the Graduate School, is course director. He is assisted by Drs. Lynwood H. Smith and Cameron G. Strong, both of Rochester and the Mayo Clinic. The faculty will be

drawn largely from the Mayo Graduate School.

For registration and applications write Dr. Edward C. Rosenow, Jr., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

Dr. Carter Resigns As UMC Director

University of Mississippi Chancellor Porter Fortune, Jr., has announced that Dr. Robert E. Carter, University Medical Center director, has resigned effective October 1. Also the medical school dean, Dr. Carter will go to the University of Minnesota to develop and establish a new medical school in Duluth.



Dr. Carter

A native Minnesotan who got both his undergraduate and his M.D. degrees from the University of Minnesota, Dr. Carter completed his internship at Cleveland City Hospital, Ohio, and did postgraduate training in pediatrics at the University of Chi-

cago Clinics. He is certified by the American Board of Pediatrics.

Dr. Carter served in the medical corps of the U. S. Navy from 1951-53 attaining the rank of Lieutenant Commander. He is a member of the state medical association and the American Medical Association.

He came to the University of Mississippi Medical Center in 1967 after having been an associate dean and professor of pediatrics at the University of Iowa College of Medicine.

His appointment as Dean of the Basic Sciences Program for Medical Education at the University of Minnesota Duluth campus was confirmed at a recent Minnesota Board of Regents meeting in Minneapolis.

In announcing Dr. Carter's decision to take up the newly created and challenging position, Chancellor Fortune praised the medical educator's keen interest in medical education. "He has made a lasting contribution to the University Medical Center by his confident leadership during a period of severe stress for all medical schools," the Chancellor stated. An advisory committee will be named soon to recommend a successor, he said.

Dr. Brumby Honored By Hospital Board

The Board of Trustees of Holmes County Community Hospital has passed a resolution honoring Dr. Paul B. Brumby of Lexington, president of the Mississippi State Medical Association. The Board commended the Holmes County native for his many years of selfless service and expressed good wishes for his year as MSMA president.

The resolution is as follows:

"WHEREAS, Dr. Paul B. Brumby was born at Goodman, in Holmes County, Mississippi, in 1902; received his medical education and degree at the University of Texas in 1929, followed by internship at Shreveport Charity Hospital and further training at New York City Polyclinic and Harvard University; and returned to his native Holmes County to practice medicine in 1930;

"WHEREAS, Dr. Paul B. Brumby has remained in medical practice in Holmes County, except for military service during World War II, during which he attained the rank of Major as a medical service officer and was awarded the Bronze Star for gallantry in action on Saipan in the Pacific in 1945;

"WHEREAS, During the course of his professional career, Dr. Paul B. Brumby has rendered valuable and unselfish service to his nation and his state, including long service as members of the Councils on Legislation, Medical Service and Scientific Assembly of the Mississippi State Medical Association and Chairman of that Association's Section on General Practice;

"WHEREAS, By his years of selfless service of the highest professional order, Dr. Paul B. Brumby has endeared himself to Holmes County, and the community served by Holmes County Community Hospital, and has contributed greatly to the health care of that community by valuable contributions of time and service as a member and officer of the Medical Staff of Holmes County Community Hospital and

"WHEREAS, The leadership of Dr. Paul B. Brumby has been particularly recognized by his professional colleagues, who have but recently elevated him to the Presidency of the Mississippi State Medical Association, a position making great personal demands for service as well as a position of high honor and trust;

"Now, Therefore, *Be It Resolved* by the Board of Trustees of Holmes County Community Hospital that they do hereby express to Dr. Paul B. Brumby the deep appreciation of that board and

the community at large for his years of professional and personal service and that they do hereby express the highest wishes of all concerned for his continued success in his undertaking the office of the Presidency of the Mississippi State Medical Association, as well as in the future years of professional service that lie before him; and *Be It Further Resolved* that a suitable copy of this Resolution be presented to Dr. Paul B. Brumby and his family."

UMC Ups Freshman Class to 95

The University of Mississippi School of Medicine has upped the fall freshman class to a record 95, according to Dr. Robert E. Carter, dean.

The five-student increase over last year's incoming class marks the third expansion since the four-year school opened in 1955, Dr. Carter said. The additional state appropriations which helped fund the extra student load came in a direct effort to meet Mississippi's overwhelming need for physicians.

Medical Center Adds to Faculty

Recent faculty additions to the University of Mississippi School of Medicine include one assistant professor and four instructors.

The combined fulltime nursing and medical faculties at the University Medical Center now top the 200 mark.

Dr. Virginia Read joins the School of Medicine after three years as a fellow at the University of Alabama at Birmingham. Dr. Read, who formerly served as UMC biochemistry instructor and assistant professor from 1965 to 1968, received the B.S. degree from the University of Mississippi and the Ph.D. degree at the University Medical Center.

Three of the new instructors are in the radiology department, Dr. C. James Kees, Dr. John Gibson and Dr. Clifton L. Hester. Dr. James Norman McLeod, III, is medicine instructor and chief resident.

Image Systems Offers Microfiche Camera

A new, low cost, table top step and repeat microfiche camera is offered by Image Systems, Inc., California based manufacturer of CARD System equipment.



A table top step and repeat microfiche camera has been introduced by Image Systems, Inc. and suggested for professional use.

Using standard 105mm roll microfilm, the Image Systems Microfiche Camera is available in a choice of 5 popular formats—NMA, COSATI, COM 80, COM 84 and Decimal 10 x 10 with appropriate reduction ratios established between 20 and 30 diameters. Day-light magazines are included to permit camera loading and unloading in normal light.

Priced at \$5,750, this precision built camera is capable of producing microfiche from black and white or color originals in letter, legal or computer printout sizes at true production rates and with film quality equal to or exceeding that obtained in similar equipment regardless of price.

Simplified controls include regulation of light intensity, exposure, frame position, fiche advance, x-y platen advance and fiche counter. The camera, designed to complement an office environment, may be operated by clerical personnel with minimum training. No special wiring is needed.

The camera is one of a series of modestly priced equipment pieces produced and marketed by Image Systems, Inc. When combined, the system permits the recording, processing, titling

and duplication of microfiche on the user's premises under normal light conditions.

For dealer information, write: Image Systems, Inc., Department MS, 11244 Playa Court, Culver City, Calif. 90230.

Blind Rehabilitation Center Begun

Construction has begun on the Addie McBryde Memorial Rehabilitation Center for the Blind, a three-story structure costing over a million dollars, as an east wing of the University Medical Center in Jackson.

In 1968 the Mississippi Legislature appropriated \$225,000 state funds for the construction of this comprehensive rehabilitation center.

The first floor of the building will contain administrative offices, offices of the non-teaching staff, a conference area, and several teaching departments with offices.

Second floor will house the other teaching departments, a number of afterhour activities, the cafeteria and a state training stand which will provide short order food service for center personnel, clients, Medical Center staff and visitors to the complex.

The third floor will contain the dormitory area with an apartment for the dormitory supervisor. Proximity to the University Medical Center will enable the Center for the Blind to utilize medical specialties which would not be available in another location.

District counselors of Rehabilitation Services for the Blind, a division of the State Department of Public Welfare, will utilize the rehabilitation center to provide at least two fundamental services for many of their clients before these clients move into vocational training and employment. These services include evaluation to determine the skills that he needs in order to adjust to his environment and training in order to develop these skills.

Among the skills taught will be mobility, which should enable him to travel independently; personal management for himself and his household; communication skills, and personal adjustment skills.

Emphasis will also be given to the development of recreational skills, which will enable these handicapped individuals to enjoy and profit from leisure time.

The Center for the Blind will also provide experience in working with blind patients for University Medical Center students and staff.

ICS Schedules Third Congress

The International College of Surgeons has scheduled its Third Western Hemisphere Congress for Las Vegas, Nev., Nov. 20-24, 1970.

For further information write Dr. Aldo Parentela, International Executive Secretary, 1516 Lake Shore Drive, Chicago, Ill. 60610.

ACP Discusses Health Care Issues

The American College of Physicians (ACP) is urging its 16,000 members in communities throughout the country to exert local leadership in eliminating duplication of equipment, services and personnel among private, voluntary and public hospitals.

The College's Board of Regents sees this duplication as one of the reasons for the rising costs of medical care in the United States, costs which "must be controlled" by halting competitive planning among voluntary hospitals, private hospitals and such government hospitals as those operated by the Veterans Administration and the Armed Forces.

The Board of Regents' resolution, one of two major policy statements on health care issues, is published in the current issue of *THE BULLETIN* of the ACP, now being distributed to the College members. They are specialists in internal medicine and related specialties, most of whom have hospital staff appointments.

In a second statement, the ACP Board labeled Federal support of medical school teaching programs "erratic, sporadic and inadequate" and called for the alleviation of the "urgent manpower crisis . . . as quickly as possible to improve the availability and quality of medical services."

The ACP Regents not only recommend "increased, sustained and better planned" direct support of teaching programs, but also expanded support of research programs and continued reimbursement of teaching physicians for services they provide to patients.

The presence of research programs help the medical schools to recruit more and better teachers, the College statement explains, "because researchers working in medical schools contribute substantially to the teaching of medical students and make it possible to increase the number of

students and the quality of their education."

Dr. Edward C. Rosenow, Jr., Philadelphia, Pa., Executive Director of the American College of Physicians, said the Board statements were issued to fulfill one of the major objectives of the medical specialty society—to maintain the "efficiency" of the internal medicine "in relation to public welfare."

UMC Expands Newborn Facilities

The University Medical Center is intensifying its efforts to reduce Mississippi's high infant mortality rate with expansion of special care programs for newborn babies.

State and federal funds are combining to support the attack.

According to UMC director Dr. Robert E. Carter, the 1966 state legislature allocated matching funds for the essential link in the program, the new 82-bed nursery and newborn intensive care unit under construction atop the Medical Center Children's Hospital. A \$95,000 federal award, matched with UMC service to bring the total to \$137,000, will provide the dollars for assembling the highly skilled staff required to give critically ill babies special care and to teach Mississippi health professionals the latest techniques for helping sick newborns.

Announced recently, the grant from the Department of Health, Education and Welfare Maternal and Child Health Services division is one of five of its kind awarded across the nation this year. The United States, points out program director Dr. Alfred W. Brann, Jr., ranks 15th in the world in infant mortality. "The other four awards will be used throughout the country to attack the problem in much the same way as the Medical Center plans," he said.

Though the death rate of state newborns has been lowered in recent years, statistics still show more babies die in the first 28 days of life in Mississippi than anywhere else in the nation. Officials say these deaths account for some two-thirds of all state infants who die before they're a year old.

Most of the state newborns die of birth defects, and many if caught in time can now be treated and corrected, Dr. Brann points out. "Intensive care for newborns is a new medical-nursing specialty. Goal of the Medical Center program is to establish a model center," he said, "where the Mississippi newborn who comes into the world sick can get the special help he needs and state health professionals can learn advanced care techniques."

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Index to Advertisers

Arch Laboratories	531	Lederle Laboratories	second cover, 4, 511, 520, 521
Becton, Dickinson and Company	516A, 516B	Leonard Wright Sanatorium	6
Breon Laboratories, Inc.	8	Eli Lilly and Company	front cover, 18
Bristol Labs	16, 17, 525	Wm. S. Merrell Company	7
Burroughs-Wellcome	484C	National Drug Company	480A, 480B, 508A, 508B
Campbell Soup Company	496A	Wm. P. Poythress	484D
The Carlton Corporation	15	A. H. Robins Company	500A, 512A, 512B
Conal Pharm., Inc.	496D	Roche Laboratories	514, 515, fourth cover
Dow Chemical Company	484B	Schering Corporation	14A, 14B
Flint Laboratories	14	G. D. Searle	496B, 496C
Geigy Pharmaceuticals	484A	Stuart Pharmaceuticals	500B
Hill Crest Hospital	10	Wyeth Laboratories	11, 12
Hynson, Westcott and Dunning	3	Thomas Yates and Company	third cover
Kay Surgical	531		

IN CONCLUSION

Hospital utilization continues to grow, despite shorter patient stays. But biggest growth factor is mounting number of outpatient visits which hit astonishing total of 163 million in 1969. Admission of inpatients rose to 30.7 million for year in all types of hospitals. Total patients served was up from 121 million outpatient visits and 28 million admissions in 1968. Source of figures is American Hospital Association's survey of 7,150 institutions.

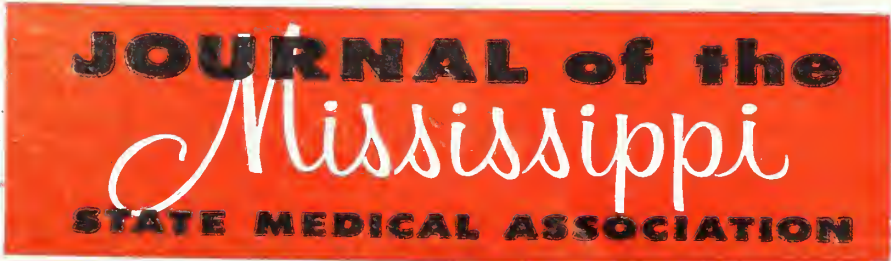
Changes in HEW's Medicare regulations will impose new and severe cost controls on hospitals. First will assure that Medicare payments aren't based on inflated costs from sales of health facilities which will now have to value depreciable properties at lowest of three figures: Actual cost, fair market value, or replacement cost adjusted to depreciation. New provision also permits preadmission diagnostic tests to help shorten patient stays.

Nixon administration welfare bill is running into stiff opposition in Senate Finance Committee. Measure, with \$1,600 annual family guarantee, would increase welfare rolls by 128 per cent to 24 million from present 10.4 million. In Mississippi, criteria would up rolls much more, to 806,000 from present 211,000 or 282 per cent. If Medicaid benefits are also provided, the state would be faced with \$164 million yearly outlay, even with present bare bones program.

Sweden's national health program, the late Walter Reuther's dream for the United States, is in serious trouble. Costs run to 20 per cent of nation's entire tax revenue, yet 60,000 patients are on waiting list for needed care. Sweden has 30 per cent fewer M.D.'s per capita than U.S., and hospital stays there are 50 per cent longer than in American institutions. Most other European national health programs are far little better, and all are faced with high costs and poor services.

Physicians' claims under CHAMPUS (original military Medicare) program can be speeded up for payment by use of new claim form. Statements for professional services should be submitted on DA Form 1863-2 dated June 1, 1967. Older forms should be destroyed. Typical turn-around time on CHAMPUS payments is five to 10 days when form is complete and correct. Supplies of newer form are free on request from state medical association's Department of Medical Care Plans.

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CONTENTS

ORIGINAL PAPERS

- Syringomyelia in
Mississippi 533 ANCEL C. TIPTON, JR.,
M.D., and ARMIN F.
HAERER, M.D.
- Case Report XIV of
Maternal Mortality Study 541 GEORGE J. NASSAR, M.D.
- Newborn Hematologic
Problems 543 JEANETTE PULLEN,
M.D., and ROSS SMITH,
M.D.

SPECIAL ARTICLE

- Radiologic Seminar C:
Roentgen Diagnosis of
Anencephaly in Utero 554 SAM LEVI, M.D.

EDITORIALS

- Medical Care
Foundations: Private
Delivery That Works 557 Medicine's Own System
- An Economic Asset of
MSMA Membership 559 Professional Liability
Help
- Like, Man, This Splits
From Webster 561 An "In" Dictionary
- Antisubstitution Kill Is
a Crooked Straw 561 Keep the M.D. Boss!
- Profile of Our Children,
A Teenage Nation 565 Astonishing Demography

THIS MONTH

- The President Speaking 556 'Growing Pains'
- Medical Organization 569 Beefed-Up Legislative
Program to Ask Aid of
All Members

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J. B. Roerig Markets Geopen

Geopen (disodium carbenicillin), a new semi-synthetic penicillin which extends the range of presently available penicillins against a variety of difficult to treat gram-negative bacteria, has been approved for marketing by the U. S. Food and Drug Administration. Pfizer's J. B. Roerig Division announced the new drug would be available to physicians promptly.

Geopen is a product of Pfizer research and is covered by U. S. Patent #3,142,673 which was granted to Pfizer. The inventor is Donald C. Hobbs, Ph.D., a scientist at the Pfizer Medical Research Laboratories at Groton, Conn. Geopen differs from the basic penicillin nucleus merely by the addition of a carboxyl group.

Since the introduction of penicillin more than a quarter of a century ago, physicians have found that certain gram-negative pathogens which can cause life-threatening infections are usually resistant to penicillin therapy. Geopen is uniquely effective against a variety of these gram-negative bacteria, including *Pseudomonas* and *Proteus* organisms.

Geopen is also effective *in vitro* against the usual gram-positive organisms susceptible to

penicillin, while extending the range of penicillin activity to include a variety of gram-negative bacteria. Susceptible organisms include *E. coli*, *P. mirabilis*, *H. influenzae*, *Salmonella*, *Shigella* and *Neisseria* species. The outstanding characteristic of Geopen is its unique effect upon *Pseudomonas aeruginosa* and indole-positive *Proteus* species, which are usually resistant to other penicillins.

Like other penicillins, Geopen is characterized by a low level of toxicity even at high blood and urinary levels. Ototoxicity (inner ear) or nephrotoxicity (kidneys) either or both of which have, until this time, been risks of therapy in many serious gram-negative infections, do not occur with Geopen. It is, however, contraindicated in those patients who have demonstrated penicillin allergy.

Geopen is not absorbed orally, but is administered intravenously and intramuscularly. Peak blood levels are obtained in one to two hours after I.M. injection, 15 minutes after I.V. injection. It is physically compatible with most commonly used intravenous fluids, and when reconstituted according to directions maintains its potency for 24 hours at room temperature and for 72 hours if refrigerated.

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NEWSLETTER

October 1970

Dear Doctor:

A new and expanded legislative program of state association is in
session with recent meeting of Council on Legislation. Asking every
member to take an active part, the council will send weekly reports
to all physicians, timed to arrive in Friday mail, during 1971 Regu-
lar Session. Program is positive, carrying out House of Delegates
and Board of Trustees decisions (see lead news story this issue).

High on agenda is positive action on chiropractic cult,
annually a legislative threat to health of Mississippi.
But spine-punchers' fortunes are on wane with President's
Task Force on Medicare and Medicaid asking Congress to
prevent payments to chiropractors under Medicaid.

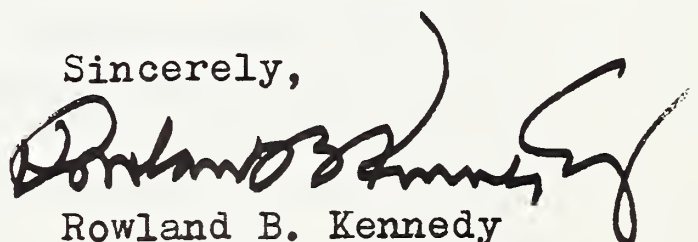
Good news for young physicians is odds-on chance that doctor draft
will be resumed in 1971 by Department of Defense. No M.D.'s have
been drafted this year, and only 246 were called up in 1969. But
every Plan enrollees, completing specialty training, are now down
50 per cent, and half of 15,000 medical officers now serving will
be eligible for discharge during next 18 months.

Homosexual aliens can be deported by U.S. Immigration and Natu-
ralization Service under recent federal appellate court decision.
Case involved Canadian who pleaded guilty to homosexual acts under
California law. Immigration officials entered deportation order
which was upheld both in federal trial and appeals courts. Case
considered legal landmark in deportation precedents.

Illinois State Medical Society has called for elimination of the
office of "coroner" from the state's new constitution. Testifying be-
fore the constitutional convention, ISMS officials said that the
only way to wipe out evils of present system is to get legal basis
out of coroner out of constitution and force legislation to correct
outdated laws. Change would not, however, require election of
100 medical examiners in each of Illinois' 102 counties.

Watch for mid-October mail for new combined billing statement of
local, state, AMA, MPAC, and AMPAC dues with AMA-ERF gift reminder.
New service, set up at last annual session and implemented by Board
of Trustees and local societies, will furnish one-check convenience
and tax-deduction documentation for association members.

Sincerely,



Rowland B. Kennedy
Executive Secretary

Upjohn Releases Oral Antibiotic

A new oral antibiotic that is reported highly effective against infections of the upper and lower respiratory tract, skin, and other soft tissue was made available to the medical profession by The Upjohn Company today.

The semi-synthetic drug—Cleocin (clindamycin)—is an outgrowth of years of research on its parent compound, Lincocin (lincomycin). By making changes in the chemical formula of Lincocin, David I. Weisblat, Ph.D., vice president, Pharmaceutical Research and Development for The Upjohn Company said its scientists had developed a new antibiotic analog with more potency, better oral absorption, and fewer side effects than the original.

Cleocin prevents the production of protein substances which bacterial cells need for survival. The drug's spectrum of *in vitro* activity includes strains of the most clinically significant gram-positive bacteria and strains of a few species of gram-negative bacteria. It is indicated specifically for infections caused by streptococci,

pneumococci, and staphylococci. The drug is also indicated for adjunctive therapy in dental infections.

In clinical tests with 1,416 patients, only 8.2 per cent reported side effects, usually mild gastrointestinal disturbances, investigators said. Skin rash and urticaria reactions were infrequent.

The new antibiotic is 90 per cent absorbed in the blood and is quickly and widely distributed in body fluids and tissues, including bone, Upjohn researchers reported. Near peak concentrations in the blood are reached in 45 minutes following a 150-milligram dose after a 12-hour fast. Peak levels are somewhat delayed when the drug is given after a meal, but ingestion of food does not appreciably modify the serum concentrations.

Laboratory tests of Cleocin HCl showed that it was 100 per cent effective against 124 strains of pneumococci and 707 strains of streptococci, with only four strains of resistant strep noted. It was 96.3 per cent effective against 1,037 strains of staphylococci, including 107 that were resistant to erythromycin. These tests indicated that most bacteria are slow in developing resistance to the drug—an advantage in long-term treatment—and that there was no cross-resistance with

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ORIGINAL PAPERS

Syringomyelia in Mississippi

ANCEL C. TIPTON, JR., M.D. and

ARMIN F. HAERER, M.D.

Jackson, Mississippi

ALTHOUGH INTRAMEDULLARY cavitation of the spinal cord was recognized earlier, the term "syringomyelia" was first coined by Oliver d'Angers in 1837 to indicate cavities within the spinal cord, regardless of etiology. Derivation of the term arises from two Greek words: syrinx—meaning pipe or fistula plus myelos—meaning marrow. Syringobulbia is defined as the presence of cavities in the medulla oblongata. It arises from the two Greek words: syrinx plus bolbos—meaning bulb.

The essential clinical features are slowly progressive atrophy of the muscles supplied by the area of cervical spinal cord enlargement, dissociated anesthesia in the involved cervical dermatomes, scoliosis, and "trophic" skin changes. If the disease begins in the thoracic, lumbar, or sacral spinal cord (much less common than cervical syringomyelia), similar signs appear in corresponding segments producing a less typical clinical picture. An apoplectic-like increase in all symptoms and evidence of rapid extension of the lesion to involve new structures may result from hemorrhage into the syringomyelic cavity. This

may be either spontaneous (due to anticoagulation) or precipitated by trauma.

The clinical features of the neurological disease syringomyelia are progressive atrophy of the muscles supplied by the area of cervical spinal cord enlargement, dissociated anesthesia in the involved cervical dermatomes, scoliosis, and "trophic" skin changes. The authors discuss 16 patients with this disease and the therapy they received on the neurological service at the University of Mississippi Medical Center.

Symptoms usually begin in the second or third decade of life. At first the lesion will often be limited to the entering pain and temperature fibers giving rise to localized analgesia. Touch and deep pressure sensibilities are preserved. This results in painless burns, ulcers, and painless traumatic injuries to the fingers which bring the patient to medical examination. Subjective sensory symptoms such as stiffness of the neck, deep boring pain, crawling and tingling paresthesias, and severe

From the Division of Neurology, University of Mississippi School of Medicine.

burning or sharp pains are common. Gradual weakness of the hand results from atrophy of the small intrinsic muscles of the hand and results in the "claw-hand deformity."

Symptoms are usually unilateral at the onset but often become bilateral within a year. Vasomotor disturbances result in the "succulent hand" which is moist, cold, swollen, and soft from edema of the soft tissues rather than actual hypertrophy of the tissues. Deep cyanosis develops when the extremity is held in a dependent position. Later the skin of the affected segments becomes hard and thickened. The fingernails coarsen, frequently cease growing, and may actually fall out.

The history and neurological examination usually suggest the diagnosis of a deep intramedul-

lary lesion of the spinal cord or the brain stem. The best diagnostic aid is myelography since, in addition to giving a reliable evaluation of the pathologic process, it allows for analysis of cerebrospinal fluid dynamics, cell abnormalities, and chemical concentrations. This should be carried out with the patient in the supine position in order to adequately examine the foramen magnum and hind-brain areas for possible cerebellar tonsil herniation. Figure 1 shows the typical widening of the cord shadow seen on myelography in cases of syringomyelia. Fractional pneumoencephalography is helpful in cases of bulbar lesions or those associated with Arnold-Chiari malformation.

TABLE 1

DIFFERENTIAL DIAGNOSIS IN SYRINGOMYELIA

Intramedullary Tumor
Hematomyelia
Progressive Spinal-Muscular Atrophy
Raynaud's Disease
Leprosy
Congenital Insensitivity to Pain
Amyotrophic Lateral Sclerosis
Multiple Sclerosis
Central Cord Syndrome (Trauma)
Cervical Herniated Nucleus Pulposus
Cervical Spondylosis
Poliomyelitis
Brachial Plexitis
Carpal Tunnel Syndrome
Diabetic Abiotrophy
Syringobulbia



Figure 1. Typical widening of cord shadow on myelography in syringomyelia.

The differential diagnosis is thus concerned with lesions of the central gray matter of the spinal cord and lower brain stem. Table 1 lists some of the conditions which are most apt to be confused with syringomyelia. An intramedullary tumor offers the greatest diagnostic difficulty. A tumor, however, usually progresses much more rapidly and is less commonly associated with scoliosis. The development of disturbances of sensibility tends to rule out progressive spinal-muscular atrophy. Raynaud's disease is not accompanied by as much analgesia or muscular atrophy. Complete loss of pain sensibility without corresponding loss of tactile sensation does not occur with cervical rib syndromes. Congenital insensitivity to painful stimuli is a total body phenomenon and is not associated with the lesser degree of analgesia seen in syringomyelia.

Some of the anomalies often associated with syringomyelia are listed in Table 2. Secondary syringomyelia may develop as a result of trauma, chronic arachnoiditis, tumors, or from absorption of blood into a hematomyelia lesion.

The consistency of the position of the cavities in the upper cervical cord and medulla oblongata

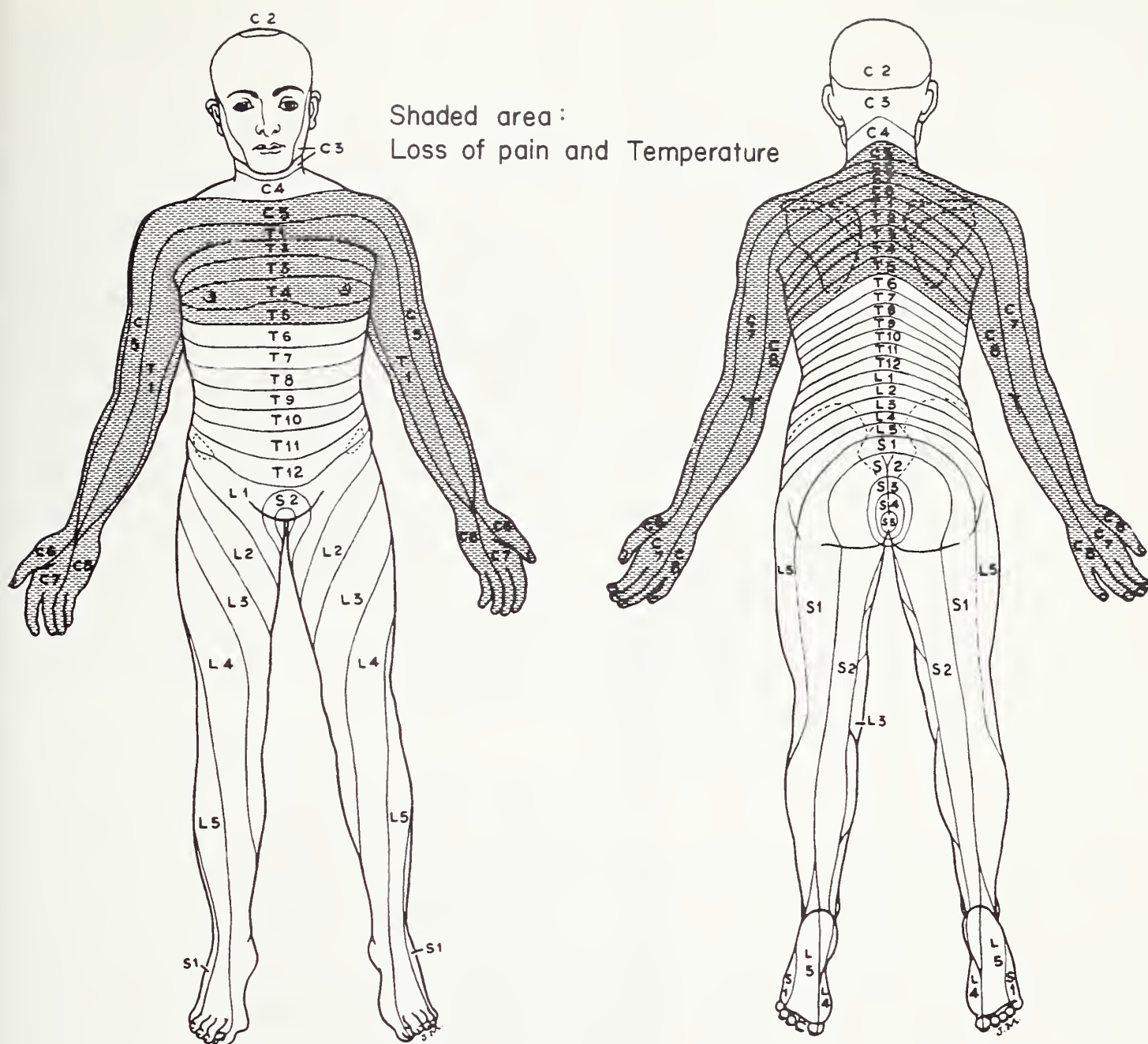


Figure 2. Typical pattern of dissociated sensory loss (touch and posterior columns spared) in a patient with syringomyelia.

with associated dilatation of the central canal points to a developmental basis for syringomyelia. Gardner's¹ theory of inadequate permeability of the roof of the fourth ventricle occurring in the critical sixth to eighth weeks of fetal life has gained great popularity. The decreased outflow of CSF from the fourth ventricle results in dilatation of the central canal of the spinal cord and subsequent syrinx formation because of transmission of the CSF pulsations which are maldirected in these patients. A congenital communicating hydrocephalus often also results and is found in many cases of syringomyelia. Gardner thus advocates exploration of the posterior fossa with visualization of the roof of the fourth ventricle in most cases of syringomyelia in order to be certain of normal egress of cerebrospinal fluid from

the fourth ventricle, with decompression of the cervicomedullary region where needed.

A review of the records at the University and Veteran's Administration Hospitals in Jackson, Mississippi, with one additional patient supplied by a local private neurologist, revealed 16 cases of syringomyelia over a 10 year period. All were males with ages ranging from five to 65 years. There were 12 Negroes and four Caucasians.

Occupations included 11 heavy laborers, two farmers, one bus driver, one office manager, and one child. Three had a history of trauma in the past, one of these with fractures of two cervical vertebrae.

The most common presenting symptom was that of weakness and numbness of the hand in 11 of the 16 patients. Four of these 11 exhibited

classical clawhand deformities. Three had received severe burns of the involved fingers and hands. Two patients presented with symptoms of cramps and "twitches" in the involved musculature and difficulty with walking. One presented with dystonic posturing of the hand and "locking" of the second and third fingers together. He also complained of inability to do fine movements of the fingers involved, a sensation of "coldness" in the hand, and "jerking" of the involved arm on coughing, sneezing, or when frightened. Three other patients complained of leg weakness and difficulty in walking, and two had significant infections of the involved extremities. One patient had involvement of bladder function with recurrent infections and a large residual urine volume.

Many different types of sensory deficits were found, ranging from a shawl-like distribution deficit to a definite sensory level for all modalities in a patient having a complete block. Figure 2 shows a typical sensory pattern in one of these patients with syringomyelia. Deep tendon reflexes were usually decreased or absent at the level of the lesion, and increased or pathologic reflexes were found below the lesion. One patient had Horner's syndrome.

Myelograms were diagnostic in eight patients revealing the classical widening of the cord. Three of these eight patients had a normal Queckenstedt response, two had a completely blocked response, and two had a partially blocked response. Two patients had fractional pneumoencephalograms both of which showed non-filling of the ventricular system. Plain x-rays showed definite platybasia in 62 per cent of the patients and questionable platybasia in all others; there was scoliosis in 25 per cent, and definite widening of the inter-peduncular spaces on cervical spine films in 16 per cent. Occipitalization of the atlas, either partial or complete, was present in 78 per cent of the patients.

TABLE 2
ASSOCIATED ANOMALIES IN SYRINGOMYELIA

Platybasia
Arnold-Chiari Malformation
Klippel-Feil Deformity
Cervical Ribs
Spina Bifida

Lumbar punctures were performed on all patients and revealed normal cell counts and chemistries except in one patient with a complete block and an elevated protein. Blood and cerebrospinal fluid VDRL tests were non-reactive in all pa-

tients. Electromyograms of the involved musculature confirmed lower motor neuron disease in four patients.

Seven patients were treated surgically. Two posterior fossa craniotomies, four cervical laminectomies, and one laminectomy from L₃ to T₁₀ were done. Insertion of a wick into the cyst cavity was done twice. One patient received a two month course of ACTH therapy without improvement. The remaining eight patients declined operative intervention and were managed with rehabilitative measures, social adjustments, and prophylactic therapy. One patient at operation was definitely noted to have a membrane obstructing the foramen of Magendie and a communication was demonstrated between the syrinx cavity, the central canal of the cord, and the obex of the fourth ventricle—thus supporting the theory of Gardner. Two were thought to be cases of secondary syringomyelia caused by trauma to the neck. One was rendered quadriplegic after a diving injury some 20 years prior to admission and from which he gradually recovered over a six month period of time.

FOLLOWUP FINDINGS

Four patients could not be followed up. The other 12 were followed for periods ranging from two to 18 years, with an average followup time of 6.9 years. At the end of the followup period, one had died of an unrelated disease, three were working, six were ambulatory but not working, and two were not ambulatory. The disease seemed to arrest in several patients postoperatively, but the ultimate outcome, due to the normally slow progression in many patients, is not entirely clear from the results of this series to date.

The majority of the cases had far advanced symptoms and neurological findings at the time of initial neurological evaluation. It should be stressed that earlier referral of these cases would hopefully result in less permanent neurologic deficit and thus a better rehabilitative prognosis.

It is interesting to note that all were males, 12 were Negroes, and that the majority were heavy laborers. One therefore wonders if this condition might not be more prevalent under these conditions in Mississippi.

Bowman and Iivanainen² reported a prognostic study of 55 patients with syringomyelia with an observation time varying between two and 45 years. Most patients exhibited slow progression of neurological impairment and in 27 patients a stationary neurological condition had lasted for greater than 10 years. Twenty-two of the patients were still working daily while 22 were

pensioned due to unfitness for work. Eleven patients had expired. The prognosis in 22 cases treated with roentgen therapy was the same as in 23 untreated cases. They point out, that with the aid of rehabilitation procedures, social adjustments, and prophylactic therapy, the working capacity and life expectancy of these patients can be maintained for longer periods of time.

Love and Olafson³ reported their results with the use of tantalum-wire to maintain a fistula between the syrinx cavity and the spinal subarachnoid space. They had 48 patients with a follow-up of greater than two years. Their experience showed that patients with symptoms of long duration or with rapidly progressive deficits responded less well to this type of surgical intervention than those with symptoms of short duration. In recent years the surgical treatment recommended by Gardner mentioned above has become the standard and most rewarding approach with arrest of progression in many instances.

SUMMARY

Sixteen patients with syringomyelia are presented, seven of which had surgical intervention.

Two were thought to be cases of secondary syringomyelia. One of the surgically treated patients supported the theory of Gardner. Presenting neurological symptoms and signs are discussed. A brief review of the literature points out pertinent findings in regard to prognosis, modes of treatment, and etiology of this condition. The possibility of an increased incidence of this condition in the Negro male heavy laborer in Mississippi is suggested. It is hoped that earlier referral of suggestive cases will result in less permanent neurological deficits and thus better rehabilitation of individuals with syringomyelia. ★★★

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Case Report XIV

Of Maternal Mortality Study

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THE FOLLOWING CASE report represents death from hemorrhage and shock, due to acute, postpartum inversion of the uterus.

CASE NO. 576-99999-68

A 25-year-old mother of four living children was pronounced dead, shortly after delivering her fifth normal child.

This patient, gravida VI, had an apparently normal antepartal course. She presumably had an adequate, gynecoid pelvis, since she had delivered five term infants, at home without difficulty. It was assumed by the physician, who saw her just prior to death, that she had been seen once at the prenatal clinic of the Washington County Health Department.

The patient was delivered at her home, attended by a midwife, on Nov. 23, 1968. The onset of labor was spontaneous. She delivered, spontaneously, a live boy who weighed six pounds eight ounces. The duration of pregnancy could not be ascertained, but was presumed to be full term. The duration of labor was not reported. The midwife stated that the patient began to bleed profusely during labor and immediately following delivery of the child. The duration of bleeding was not recorded.

With the onset of the third stage of labor there seemed to be a complete absence of data except for the knowledge that no consultation was sought, no effort was made to transport the patient to a hospital and no blood was given. There is also no knowledge as to placental delivery and whether

the placenta was intact. A physician was summoned, who diagnosed the presence of an acute, puerperal uterine inversion in a dying woman. The patient expired on Nov. 23, 1968.

The patient in this case report is a 25-year-old Negro female, gravida VI, who died shortly after delivering her fifth normal child. She was diagnosed as having an acute, puerperal uterine inversion. The committee discusses the case, rating it as avoidable if a physician had been in attendance when the uterus inverted.

This case was reviewed anonymously in the usual manner, by a member of the MSMA Committee on Maternal and Child Care and discussed at a regular, quarterly meeting of the committee.

The adequacy of the information received was rated at 1 on an ascending scale of 1 to 5. The committee expressed regret that the physician was called in too late to save the mother's life. This death was classified as an avoidable, obstetric death, due to hemorrhage and shock resulting from acute, postpartum inversion of the uterus. The committee members also felt that midwives should be constantly mindful of the absolute necessity of referring patients promptly at the earliest sign of any deviation from normal of a pregnancy or delivery under their care to a physician and the nearest hospital. Fortunately, most obstetrical deaths can be prevented and it behooves one to seek out early signs of impending compli-

Obstetrics and gynecology member, Committee on Maternal and Child Care.

cations and early consultation and institution of treatment.

The author would like to review, briefly, some of the pertinent facts relating to this complication.

1. Occurrence

Ten cases were reported at Emanuel Hospital in 44,723 deliveries from 1950 through 1959.¹ The proportion of inversions in the Negro and White race is essentially equal.² McCulloch³ estimated that the average age at which inversion occurs is 27. Torpin² stated that more than 50 per cent of reported cases were in the primipara. The majority of the cases reported occurred following term pregnancy.⁴

2. Etiology

A. Predisposing factors:

(a) Laxity or thinness of the uterine wall at the placental site.

(b) Uterine atony, following exhaustive labor or uterine muscular incoordination, which may be precipitated by the administration of an oxytocic agent.

(c) Overdistension of the uterus such as in multiple pregnancy or hydramnios.

(d) Fundal implantation of the placenta, more common in the primipara, also varying degrees of accreta.

B. Precipitating factors:

(a) Traction on the cord.

(b) Excessive fundal pressure.

(c) Manual removal of the placenta, by incomplete removal or suction affect resulting from rapid withdrawal of the operator's hand from the uterus.

(d) Short cord.

(e) Sudden changes in intraabdominal pressure, such as sneezing, coughing, vomiting or attempting to sit up.

The first three precipitating factors, listed above, account for over 50 per cent of cases of uterine inversion and constitute mismanagement of the third stage of labor and are the ones over which one has the most control; so its dangers are worth reiterating.

3. Diagnosis

A. Complete inversion is relatively self-diagnostic.

B. Incomplete inversion:

(a) Cupping or dimpling of the fundus on abdominal palpation.

(b) Hemorrhage.

(c) Shock out of proportion to blood loss.

An immediate thorough examination of the entire genital tract will quickly establish the diagnosis. Such an examination should be performed routinely after every delivery.

4. Treatment

This consists of early diagnosis and prompt replacement of the uterus, once shock measures are instituted. It should be emphasized that as long as the "inflicting agent" of shock is still in action and will remain so unless the uterus is replaced immediately, the patient's recovery is imperiled. If the placenta is still attached, the inversion must be reduced before attempting to deliver the placenta.

It must be remembered that deep anesthesia should be employed to relax the cervix. Occasionally the injection of seven drops of adrenalin into the cervical ring may induce cervical relaxation and then cupping the fingers over the inverted portion of the uterus with upward push will replace the uterus.

Subacute and chronic cases of uterine inversion may require surgical intervention for definitive treatment.

SUMMARY

A maternal death due to postpartum inversion of the uterus is reported. This condition can be easily diagnosed and treated. In over 50 per cent of cases it can be prevented by proper management of the third stage of labor and in the minority group of reported cases it may be spontaneous and can "happen to anyone."

A complete genital examination after each delivery is strongly recommended as a routine measure to rule out the presence of such a postpartum complication. ★★★

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Newborn Hematologic Problems

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IN EVALUATING the newborn's hematologic status, one must take into account certain influences which need be considered only in this age group. The mother's hematological status may influence that of the fetus. Since fetal blood formation and hemostatic mechanisms mature progressively during intrauterine life, the degree of maturity at birth influences the newborn's hematological status.

Perinatal events predisposing to maternal and/or fetal blood loss must be taken into account. Finally, one must remember that the normal newborn's blood counts change progressively over the first few weeks of life from those best suited to intrauterine life to those best suited to extrauterine life.

Anemia and hemorrhage are the two principal hematological problems which are encountered commonly in the neonatal period.

To identify anemia in the newborn, one must be familiar with normal values for hemoglobin and hematocrit in this age group. Unfortunately in the newborn, normal values have been difficult to delineate, because of the influence of several factors. The site of sampling affects results, since hemoglobin concentration is about 2.5 to 3.5 gm./100 ml. higher in capillary (heel stick) samples than in simultaneously obtained venous samples.^{1, 2} (The higher capillary hemoglobin is apparently due to sluggish circulation in peripheral vessels during the first few days of life, with resultant transudation of plasma from the small vessels.³) Early versus delayed clamping of the cord at delivery influences the total red cell volume in the newborn.⁴

In all infants during the early hours after birth, an increase in hemoglobin concentration occurs, usually in the range of about 3 gm./100 ml. This is probably due to a decrease in plasma volume during early extrauterine existence.⁴

Influences pertinent to the evaluation of the newborn's hematologic status are discussed. Normal values, the anemias, bleeding, thrombocytopenia, hemophilia, and a range of conditions are examined, discussed, and framed with practical guides. Vitamin K deficiency and transfusion axioms are also considered. The authors present a study of sufficient depth to afford comprehensive consideration of the subject area.

In spite of these variables, fairly reliable norms have been established. Normal cord blood hemoglobin is in the range of 16.5 to 17.1 gm./100 ml., with simultaneous capillary hemoglobin determinations of about 19.8 gm./100 ml. Normal cord blood hematocrit values are approximately 51% to 56%. In general, a newborn is considered anemic if the cord blood (or other venous sample) hemoglobin is less than 14 gm./100 ml., or if the capillary hemoglobin is below 15 gm./100 ml. The mean hemoglobin values for premature infants are slightly lower, with a mean hemoglobin at 38 weeks' gestation of 15.2 gm./100 ml., at 34 weeks of 15 gm./100 ml., and at 28 weeks of 14.5 gm./100 ml.³ Table 1 records mean values for peripheral blood counts obtained in a large series of normal newborns.

From the Department of Pediatrics, University of Mississippi School of Medicine, Jackson, Miss.

During the first week of life, there is normally no decrease in hemoglobin values. Thereafter, the hemoglobin and hematocrit fall steadily because of minimal marrow erythropoiesis and decreased red cell survival. The term infant reaches a minimum hemoglobin level (around 9 to 10 gm./100 ml.) at approximately three months of age. In the premature, the fall occurs more rapidly and the low point (7.5 to 9.0 gm./100 ml.) is reached at about six to eight weeks of age. In general, the smallest infants exhibit the most rapid fall in hemoglobin and develop the most marked degree of anemia.

When the above described hemoglobin decline reaches frankly anemic levels (the so-called physiologic anemia), the bone marrow is stimulated to reinstitute active erythropoiesis, and the minimal anemia is gradually corrected. In the premature infant, the actively resumed erythropoiesis may not be sufficient to keep up with the rapidly growing baby's blood volume and the "physiologic" anemia may persist longer than in the term infant.

UTILIZATION OF IRON

At the time active erythropoiesis resumes, iron is actively utilized in the formation of new hemoglobin. In the term infant, the iron derived from the breakdown of the initial large red cell mass and that derived from tissue iron stores supplies adequate iron for red cell production, provided dietary intake is adequate. In the premature, however, tissue iron stores are often inadequate, since the majority of fetal iron is acquired transplacentally during the last trimester of pregnancy. Therefore, supplementary iron should be administered to the premature infant, beginning at about the time active red cell production begins.

As a general rule, iron supplementation is begun at four to six weeks of age for those infants

remaining in the premature nursery, or at the time of discharge if this is prior to one month of age. For prophylaxis, 8 to 15 mg. of elemental iron per day is suggested. For treatment of overt iron deficiency anemia, 5 to 7 mg./kg. of elemental iron per day is recommended.

HEMOLYSIS

Anemia in the neonatal period usually results from one of two major causes: hemolysis or hemorrhage.

When hemolysis of fetal cells occurs in utero, it is usually caused by maternal-fetal red cell Rh antigen incompatibility. If in utero hemolysis is extensive, the infant may be born severely anemic.

Hemolysis occurring in the first few days of extrauterine life is more common and is evidenced by the following: (1) Increased reticulocyte count and increased numbers of nucleated red cells, above normal values shown in Table 1, (2) accumulation of red cell break-down products, principally bilirubin, with a predominance of indirect reacting bilirubin, and (3) falling hemoglobin during the first week of life without evidence of hemorrhage.

The leading cause of hemolysis in the newborn is maternal iso-sensitization against fetal red cells.⁵ Both Rh and ABO incompatibilities can cause hemolysis. Because the diagnosis and treatment of this type of hemolytic disease of the newborn constitutes a topic in itself, the authors have decided to devote a separate article in this series to the diagnosis and management of isoimmune hemolytic disease in the newborn. Other types of hemolytic anemias in the newborn period may be divided into acquired and hereditary hemolytic anemias.

Neonatally acquired hemolytic anemias related to infections are seen commonly in pediatric practice. In the newborn, severe infections (particu-

TABLE 1
MEAN NORMAL VALUES IN THE FULL TERM INFANT*

Value	Cord Blood	Day 1	Day 3	Day 7	Day 14
HGB (gms/100 ml.)	16.8	18.4	17.8	17.0	16.8
Hematocrit (%)	53.0	58.0	55.0	54.0	52.0
Reticulocytes (%)	3-7	3-7	1-3	0-1	0-1
Nuc. RBC/100 WBC	7-8	1-5	0-2	0	0
Platelets/cu.mm.	290,000	192,000	213,000	248,000	252,000
WBC's/cu.mm.	18,100	22,000	11,000	12,200	11,400

* From combined data of Oski and Naiman, 1966, and Kato, 1935.

TABLE 2

SOME OF THE MORE COMMONLY USED AGENTS
REPORTED TO PRODUCE HEMOLYSIS IN
PATIENTS WITH G-6-PD DEFICIENCY

ANTIMALARIALS

Quinacrine (Atabrine)
Quinine

ANTIPYRETICS AND ANALGESICS

Acetylsalicylic Acid (ASA)
Acetophenetidin (Phenacetin)
p-Aminosalicylic Acid (PAS)
Aminopyrine

INFECTIONS

Respiratory Viruses
Infectious Hepatitis
Infectious Mononucleosis
Bacterial Pneumonias

NITROFURANS

Nitrofurantoin (Furadantin)
Furazolidone (Furoxone)
Nitrofurazone (Furacin)

SULFONAMIDES

Sulfanilamide
Sulfacetamide (Sulamyd)
Sulfamethoxypyridine (Kynex, Midicel)
Salicylazosulfapyridine (Azulfidine)
Sulfisoxazole (Gantrisin)
Sulfapyridine

MISCELLANEOUS

Acetylphenhydrazine
Chloramphenicol
Chloroquine
Dimercaprol (BAL)
Fava Beans
Methylene Blue
Naphthalene ("Moth Balls")
Nalidixic Acid (Negram)
Orinase
Phenylhydrazine
Probenecid
Quinidine
Vitamin K (Large doses of water soluble analogues)

larly sepsis) are likely to be accompanied by hemolysis. Bacterial, viral (cytomegalic inclusion disease, rubella syndrome), protozoan (toxoplasmosis) and spirochetal (syphilitic) infections may cause hemolysis. Hemolytic anemias may sometimes be precipitated by the administration of certain drugs to the mother prior to delivery or to the neonate after delivery.

Hereditary hemolytic anemias involve an intrinsic defect in the infant's red cells, which causes shortened red cell survival.

Morphologic abnormalities of the red cell can often be suspected from routine examination of

the newborn's peripheral blood smear. Congenital spherocytosis may, on occasion, present with extensive hemolysis in the nursery, sometimes requiring exchange transfusion. Spherocytes may or may not be numerous on the peripheral smear at this early age. (One should keep in mind that some spherocytes may be seen in any hemolytic anemia, and particularly in ABO incompatibilities.) Since congenital spherocytosis is inherited in a dominant fashion, the diagnosis can often be confirmed by family studies. Congenital ovalocytosis (elliptocytosis) may occasionally cause significant hemolysis in the neonatal period.

HEMOGLOBINOPATHIES

Hemoglobinopathies are not usually manifested as hemolytic disease during the neonatal period, because of the predominance of fetal hemoglobin during this time. However, a positive test for sickling may sometimes be obtained during the newborn period.

Inherited enzymatic deficiencies of the red cells may cause hemolysis in the nursery. The most common red cell enzymatic deficiency is that of glucose-6-phosphate dehydrogenase (G-6-PD), fairly common in Negro infants. Drugs known to precipitate hemolysis in G-6-PD deficient patients (Table 2) may cause neonatal hemolysis when administered to the mother near term. Apparently newborn infants with G-6-PD deficient red cells may sometimes demonstrate spontaneous hemolysis without drug provocation. Other congenital red cell enzymatic deficiencies occur but are quite rare.

HEMOLYTIC ANEMIA

Even in the normal newborn, many of the red cell enzymes are immature, causing hemolysis to occur more readily than in the older child or adult.³ Almost all types of neonatal hemolytic anemias, if severe, may result in hyperbilirubinemia of sufficient degree to require exchange transfusion to prevent kernicterus. Table 3 provides a working diagram for the diagnosis of the etiology of a hemolytic anemia in the newborn period.

Fetal bleeding, before or during delivery, accounts for only 5 to 10 per cent of cases of anemia in the newborn period. When severe perinatal bleeding does occur, however, the mortality may exceed 50 percent.⁶ Rapid loss of a relatively small volume (30 to 50 ml.) of blood in a newborn is sufficient to produce shock.⁷ So small a volume may go undetected during delivery or be misinterpreted as maternal bleeding.

The fetus can bleed from six different pathways:

(1) **Bleeding from the umbilical cord.** A nor-

mal cord very rarely tears during delivery but when aberrant cord vessels or velamentous insertion of the cord are present, rupture of umbilical vessels may occur.

(2) Spontaneous bleeding from the placenta at delivery. Though most maternal vaginal bleeding represents bleeding from the maternal side of the placenta, placenta previa, abruptio placentae and vasa previa may cause fetal as well as maternal bleeding.

(3) Incision into the placenta during cesarean section. An anteriorly placed placenta may be incised during cesarean section, resulting in significant blood loss from the fetus.

(4) Fetomaternal hemorrhage. Passage of fetal red cells into the maternal circulation occurs commonly during pregnancy. The amount of fetomaternal hemorrhage is usually less than 1 ml., but occasionally is of sufficient degree to cause severe anemia in the newborn. The majority of fetomaternal hemorrhages occur during delivery, though rarely a chronic leakage of red cells from fetus to mother can occur during pregnancy.

(5) Twin to twin hemorrhage. When twins share a monochorionic placenta, blood from one twin may be diverted to the other twin by way of intercommunications between the vessels of the placenta, resulting in anemia in one twin and plethora in the other. A twin to twin transfusion should be suspected if a hemoglobin difference of 5 gm./100 ml. or greater is evident in the twins at delivery.

(6) Internal hemorrhage. Breech deliveries may be associated with hemorrhage into the liver, kidney, spleen or retroperitoneal area. Traumatic or precipitous deliveries may cause subdural or subarachnoid hemorrhage of sufficient magnitude to result in anemia. Even cephalohematomas may be of sufficient size to produce anemia.

The treatment of the newborn who is anemic at birth depends on the degree of anemia and the acuteness of the blood loss. If the hemorrhage has been chronic and of minimal degree during intrauterine life, the baby may be anemic but in no acute distress. In this case, transfusion, if necessary at all, can best be given in the form of packed cells. If the bleeding has been severe and prolonged in utero, elevated venous pressure or evidence of edema in the infant may require that packed cells be administered by means of a partial exchange transfusion.

If extensive hemorrhage occurred shortly before or during delivery, the newborn will exhibit extreme pallor and shock at birth. In such a baby, the hemoglobin value may not immediately reflect the recent blood loss. This infant requires immediate transfusion with whole blood.

BLEEDING AFTER DELIVERY

Excessive bleeding in an infant in the first days of life suggests the possibility of an abnormal hemostatic mechanism in the baby. Hemostatic defects in the neonate may be acquired and transient, or inherited and lifelong. The principal causes of ineffective hemostasis in the newborn are: thrombocytopenia, vitamin K deficiency, liv-

TABLE 3
DIFFERENTIAL DIAGNOSIS OF COMMON HEMOLYTIC ANEMIAS IN THE NEWBORN

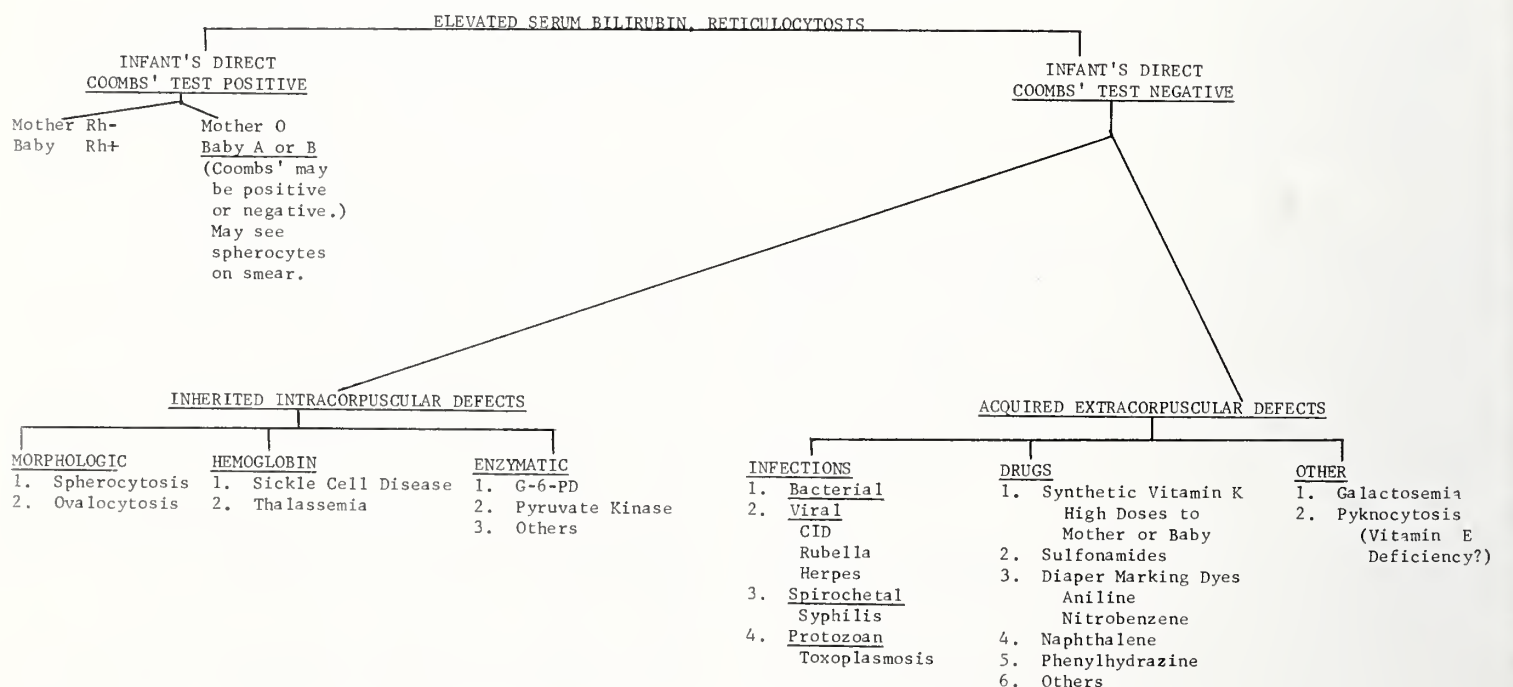


TABLE 4
DIAGNOSTIC APPROACH TO THE THROMBOCYTOPENIC NEWBORN*

MOTHER----

1. History previous bleeding (ITP?), drugs, illness, infants with purpura, rubella in T₁
2. Test for syphilis
3. Platelet count

Low

1. Maternal ITP, S.L.E.
2. Drug purpura
3. Inherited thrombocytopenia

Normal

Examine Infant

a. Normal

- 1) Isoimmune purpura
- 2) Thiazides
- 3) Inherited thrombocytopenia
- 4) Early congenital aplastic anemia

b. Hepatosplenomegaly

- 1) Infections
 - bacterial sepsis
 - congenital syphilis
 - disseminated herpes
 - cytomegalic inclusion disease
 - congenital toxoplasmosis
- 2) Congenital leukemia

c. Congenital anomalies

- 1) Giant hemangioma
- 2) Rubella syndrome
- 3) Absent radii
- 4) Fanconi's anemia

* From Oski and Naiman, 1966.

er immaturity, hemophilia and intravascular coagulation.

Petechial skin lesions, especially when widely distributed, suggest the possibility of thrombocytopenia. A peripheral blood smear should be examined to determine if the platelets appear decreased on smear. If one sees less than five platelets in most oil immersion fields, thrombocytopenia is likely. This should be confirmed with a phase platelet count. If the platelet count is less than 100,000/MM³, significant thrombocytopenia exists. Overt bleeding usually occurs only if the platelet count is less than 30,000/MM³.

In a baby with thrombocytopenia, but with no other coagulation defect, bleeding is usually confined to skin petechiae and ecchymoses and to

mucous membrane bleeding. However, there is always the possibility of an occasional thrombocytopenic baby's bleeding into internal viscera. Though intracranial hemorrhage is rare in neonatal thrombocytopenia, it may occasionally occur. It is most to be feared in the immediate postdelivery period in the presence of general, severe thrombocytopenic bleeding.

Normal values for phase platelet counts in term infants during the first week of life do not differ significantly from those of older children and adults (Table 1). Routine determinations of platelet counts in premature infants with no evidence of bleeding have been done in only a few nurseries. However, there is evidence that some premature babies may have "physiologically" low

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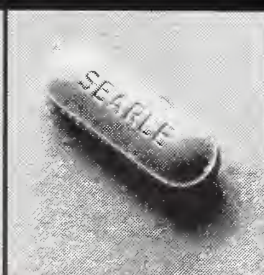
Pro-Banthine 15 mg.
propantheline bromide



Pro-Banthine 15 mg.
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with
Dartal 5 mg.
thiopropazate
dihydrochloride



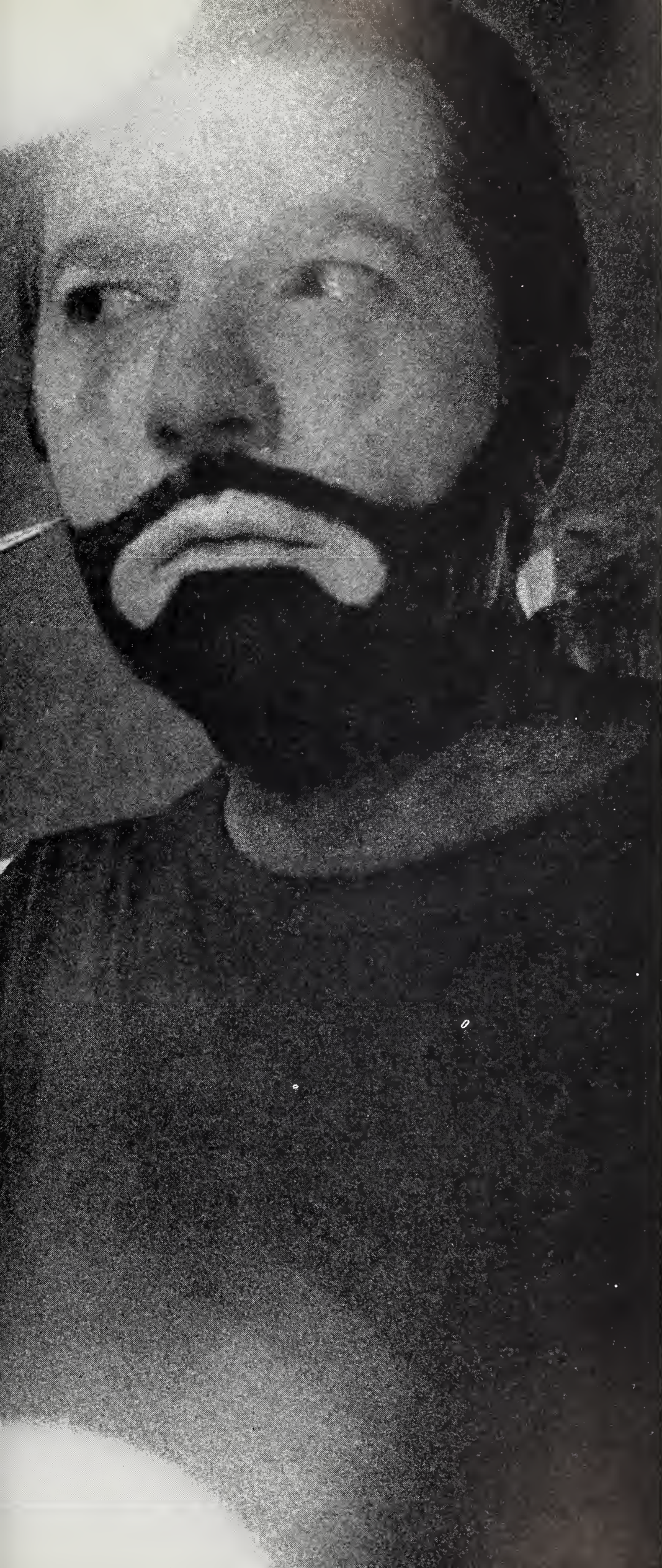
Pro-Banthine 15 mg.
propantheline bromide
with
Phenobarbital 15 mg.
warning:
may be habit forming



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Pro-Banthine® (propantheline bromide)

Indications: Peptic ulcer, gastroenteritis, pylorospasm, biliary dyskinesia, functional hypermotility and irritable colon.

Contraindications: Glaucoma, severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

Pro-Banthine® 15 mg.
(propantheline bromide)
with

Dartal® 5 mg.

(thiopropazate dihydrochloride)

Indications: Peptic ulcer, spastic constipation, nonspecific gastritis, functional gastrointestinal disorders, pylorospasm, hyperhidrosis, irritable bowel syndrome, mucous or ulcerative colitis, functional diarrhea.

Contraindications: Glaucoma, severe cardiac disease.

Warnings: Pro-Banthine with Dartal should not be administered to patients who are under the influence of barbiturates, alcohol or narcotics. The drug should be administered cautiously to epileptic patients or those in depressed states, patients with liver disease and to pregnant women. Hypersensitivity to Dartal may occur rarely in patients with known sensitivity to similar drugs.

Side Effects: Dryness of the mouth, mydriasis, hesitancy of urination; less commonly extrapyramidal (restlessness, dystonia and signs of pseudoparkinsonism such as muscular rigidity, fixed facies, tremor, ataxia, festinant gait and drooling), parasympatholytic (blurred vision, xerostomia, hypotension, nasal congestion and constipation) and curare-like (loss of control of voluntary muscles, particularly the muscles of respiration) reactions. Rarely, leukopenia or allergic purpura. A generalized erythematous skin reaction may occur. Side effects characteristic of phenothiazines such as grand mal convulsions, altered cerebrospinal proteins, cerebral edema, potentiation of the effects of atropine, heat or phosphorus insecticides, autonomic reactions, endocrine disturbances, reversed epinephrine effect, hyperpyrexia or pigmentary retinopathy may theoretically occur but have not been reported with Dartal. Severe hypotension following recommended doses occurs more commonly in patients who are also afflicted by other medical disorders such as mitral insufficiency or pheochromocytoma, and particular attention should be paid to such a possibility although this has not been observed with Dartal.

Adult Dosage: One tablet three times a day.

Pro-Banthine® 15 mg.
(propantheline bromide)
with

Phenobarbital 15 mg.

Warning: May be habit-forming.

For **Indications**, **Contraindications**, **Precautions**, **Side Effects** and **Dosage** see Pro-Banthine. In addition, phenobarbital should be administered with caution to patients with liver disease, mental disturbances or a significant degree of hypoxia.

Pro-Banthine P.A.®

prolonged acting brand of propantheline bromide
For **Indications**, **Contraindications**, **Precautions** and **Side Effects** see Pro-Banthine.

Dosage Form: Capsule-shaped, compression-coated, peach tablets of 30 mg. for oral use.

Dosage: The recommended initial dosage is one tablet in the morning and one at night.

platelet counts during the first weeks of life.^{3, 8} This was noted particularly in some very immature newborns (less than 1,700 grams birth weight). If petechiae or other bleeding is present in a newborn in the presence of thrombocytopenia, the thrombocytopenia should not be considered physiologic.

Petechiae and thrombocytopenia in the newborn period should always arouse the suspicion of infection. Almost all severe bacterial infections, particularly gram negative sepsis, can cause platelet destruction as well as hemolysis. Thrombocytopenia, in the presence of hepatosplenomegaly, suggests cytomegalic inclusion disease, toxoplasmosis or lues, and may be seen in the rubella syndrome.

Many drugs may cause thrombocytopenia in a hypersensitive recipient. In particular, sulfonamides, quinine and quinidine may cause thrombocytopenia in an occasional mother and in her baby if the drug is administered to the mother near term.

THIAZIDE DERIVATIVES

Chlorothiazide diuretics do not cause maternal thrombocytopenia; however, maternal thiazide administration during pregnancy occasionally results in thrombocytopenia in the newborn baby.³ This effect is apparently through suppression of platelet production by the fetal bone marrow. This thrombocytopenia may be fairly severe, and may persist for as long as three months. In view of the large number of women taking thiazide derivatives during pregnancy, it is apparent that

TABLE 5
VITAMIN K CONTENT OF CERTAIN MILKS AND MILK SUBSTITUTES IN MICROGRAMS/LITER OF STANDARD DILUTION

Cow's milk	60
Skimmed cow's milk	35
Human milk	15
Sobee	80
Mull-soy	71
Enfamil	40
Similac	35
Nutramigen (casein hydrolysate)	18
Gerber's meat base	16
Gerber's lambase	7
Isomil	17-36*

* Recently changed to 150 mg./l.¹⁶
From Williams et al, Ped. 44:745, 1969.

neonatal thrombocytopenia only rarely results from this drug.

The term immune thrombocytopenia is used to designate thrombocytopenia in which antiplatelet antibodies cause platelet destruction. Unfortunately, platelet antigens and antibodies are difficult to identify with most currently employed serological methods, so that only a few centers attempt to demonstrate antiplatelet antibodies. Therefore, the diagnosis of immune thrombocytopenia must often be one of exclusion or of high suspicion. Platelet antibodies in baby's serum are transplacentally acquired maternal antibodies, and may be acquired by the baby in either an active or a passive fashion.

PLATELET INCOMPATIBILITY

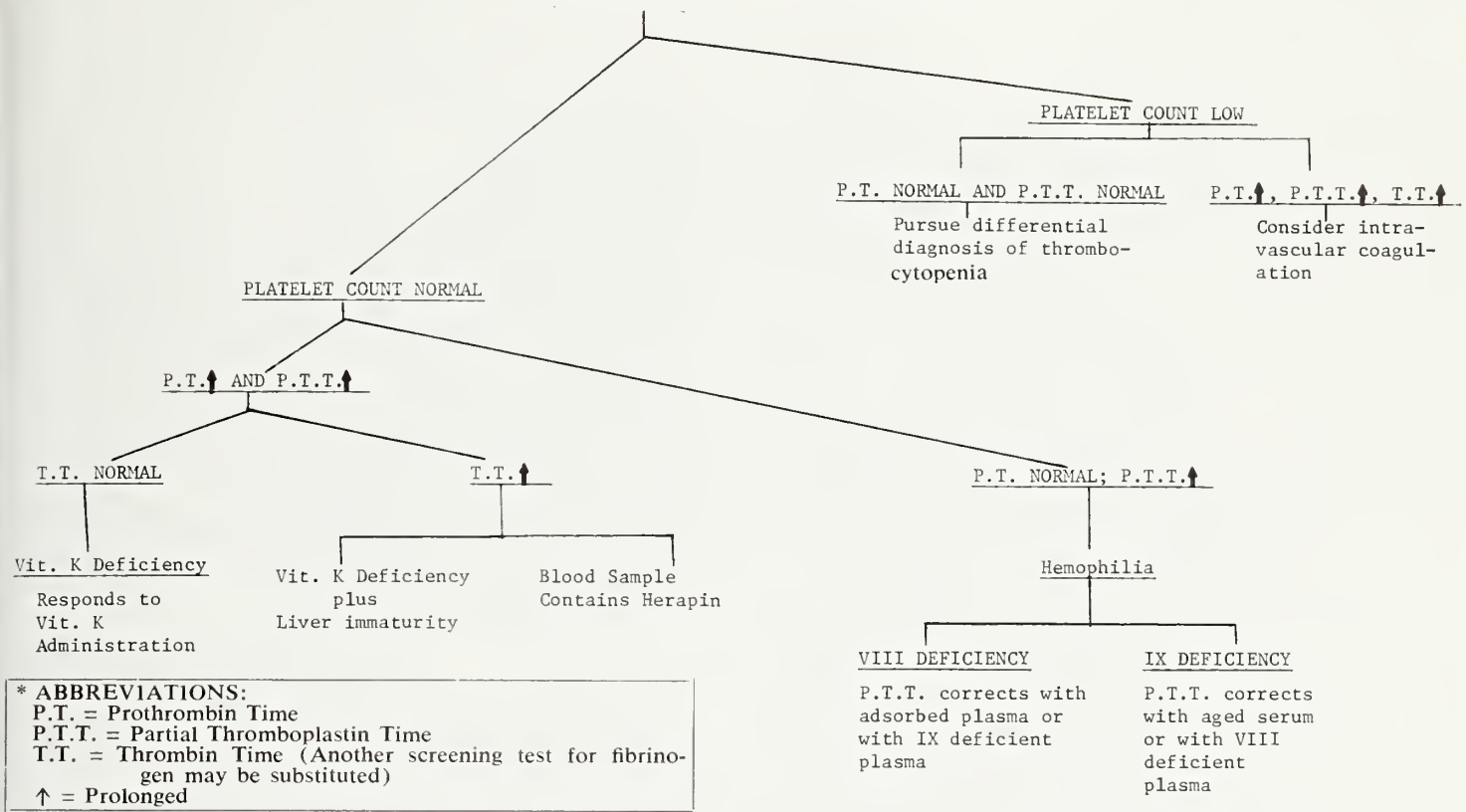
Actively acquired, isoimmune, thrombocytopenia occasionally occurs when incompatibility exists between the platelet antigens of the fetus and those of the mother. (This usually involves the platelet PI^{A1} antigen, which only 2 per cent of people lack, but which causes over half of maternal platelet isoimmunization.)⁹ This disorder due to fetal-maternal platelet incompatibility is analogous to neonatal hemolytic disease due to fetal-maternal red cell incompatibility.¹⁰ In actively acquired neonatal thrombocytopenia, the maternal platelet count is normal while the baby's platelet count is low.

Maternal sensitization to baby's platelets is as likely to occur with the first, as with subsequent pregnancies. Most infants with isoimmune thrombocytopenia have only generalized petechiae, which are usually present at delivery, or within a few hours thereafter. However, more severe bleeding may occur. There is about a 12 per cent mortality in babies with actively acquired thrombocytopenia, death usually resulting from intracranial hemorrhage. Most babies with this type of thrombocytopenia have a gradual return of the platelet count to normal, the count usually being greater than 60,000/MM³ by two to three weeks of age.¹⁰

ANTIPLATELET ANTIBODIES

In passively acquired neonatal thrombocytopenia, maternal isoimmunization to fetal platelets does not occur. Rather, the mother, usually prior to pregnancy, has developed autoimmune antibodies against her own platelets. During pregnancy, these antibodies may traverse the placenta and cause thrombocytopenia in the baby. In this case, both the maternal and neonatal platelet counts are low. Mothers with lupus or other collagen diseases or with chronic idiopathic thrombocytopenia purpura are particularly prone to pass antiplatelet antibodies on to their infants.

TABLE 6
NEWBORN HEMOSTATIC DEFECTS*



Most babies with passively acquired immune thrombocytopenia are only mildly affected, with only a few showing significant bleeding.³ Duration of the thrombocytopenia varies greatly (from one week to four months), but the risk of active bleeding seems to be greatly decreased after the first few days of life.

Other causes of neonatal thrombocytopenia are outlined in Table 4, which sketches one differential diagnostic approach to thrombocytopenia in the newborn.

HEMOPHILIA

Though hemophilia (inherited deficiency of plasmatic coagulation factor VIII or IX) is an uncommon cause of hemorrhage in the newborn, it should always be ruled out in the bleeding male infant.¹¹ Family history is often suggestive. Since maternal factor VIII and factor IX do not cross the placenta, the hemophiliac baby is born with an already low level of the hemophiliac factor. Therefore, it is surprising and unexplained that hemophiliac babies almost never develop bleeding from birth trauma. Usually, the hemophilia is not suspected in the nursery unless the child is circumcised or requires other minor surgical procedures. After circumcision, the hemophiliac baby often has oozing from the circumcision site for several days.

An occasional hemophiliac baby will develop a cephalohematoma, bleeding from the umbilical

cord or extensive bruising. Once the diagnosis of hemophilia is affirmed, it is most important to document the type of hemophilia, since specific concentrates of either factor VIII or factor IX are now available for therapy. If a hemophiliac baby does have bleeding in the newborn nursery, treatment should be with transfusion of fresh whole blood, fresh plasma or fresh-frozen plasma or with specific concentrates.

Whereas the hemophiliac is deficient in only one coagulation factor, multiple factor deficiencies occur in some of the more common syndromes of abnormal hemostasis in the newborn.

LIVER IMMATURITY

Many of the plasmatic coagulation factors, namely factors V, VII, IX, X, XI, prothrombin and fibrinogen are synthesized by the liver. In all newborn infants, some degree of liver immaturity exists. In the term infant and in the premature of high birth weight, liver immaturity is seldom of sufficient degree to cause significantly deficient synthesis of coagulation factors. However, in the low birth weight premature, extreme liver immaturity may result in significantly low levels of the liver-synthesized coagulation factors, and bleeding may result. This type of bleeding has been called "secondary" hemorrhagic disease of the newborn.¹² It does not respond well to vitamin K, and must be treated by infusion of fresh blood or plasma to supply the deficient factors.

In the synthesis of certain of the coagulation factors (factors VII, IX, X and prothrombin), the liver must utilize vitamin K. Normal newborns are in a somewhat precarious state as to vitamin K availability. The bacterial intestinal flora, an important source of vitamin K in the older child and adult, is not established in the newborn until several days after birth. Dietary intake of vitamin K is low during the first days of life. Because of the deficient supply of vitamin K, newborns "normally" demonstrate mild deficiencies of the K dependent clotting factors in the first two to five days of life.¹² In a few infants, these factor deficiencies are exaggerated enough to cause clinical bleeding, the so-called "classical" hemorrhagic disease of the newborn.

When hemorrhagic disease secondary to vitamin K deficiency occurs, the neonate may bleed profusely from capillary and veni-puncture sites and occasionally from the umbilical cord. The infant may demonstrate hematomas in skin or muscle, gastrointestinal bleeding, hematuria and rarely hemorrhage into internal viscera or the central nervous system.

VITAMIN K PROPHYLAXIS

Prophylactic administration of vitamin K to the newborn prevents hemorrhagic disease due to vitamin K deficiency. It has been shown that high doses (greater than 10 mg.) of the synthetic, water-soluble vitamin K analogues (Menadione, Synkavite, Hykinone) may result in hyperbilirubinemia and kernicterus. The current recommendation for vitamin K prophylaxis in the newborn, for both term and premature infants, is 1 mg. of naturally-occurring vitamin K₁ (Aqua-mephyton, Konakion) or 1 mg. of synthetic water-soluble vitamin K (Hykinone) administered intramuscularly to the newborn at birth. Death and morbidity from vitamin K deficient hemorrhagic disease of the newborn can be safely prevented by this simple prophylactic procedure.^{12, 13}

When hemorrhagic disease occurs in an infant who has not received vitamin K prophylaxis, treatment consists of the intravenous or intramuscular administration of 1 to 2 mg. of vitamin K₁ (Aqua-mephyton, Konakion). The intravenous route is preferred if a superficial vein is available, since intramuscular injections may cause hematomas. For intravenous administration, vitamin K should be diluted with a small amount of saline and injected slowly.

If vitamin K deficiency is the cause of the bleeding, response to therapy is striking. Hemor-

rhage slows within two hours and an improvement in the coagulation studies can be demonstrated within four hours, with complete correction within 12 to 24 hours. If hemorrhage is life-threatening or extensive, initial transfusion with fresh whole blood is indicated, while waiting for vitamin K effect.

With widespread adoption of routine vitamin K prophylaxis in the newborn nursery, hemorrhagic disease due to vitamin K deficiency has become increasingly rare during the first week of life. However, physicians are less alert to the possibility of vitamin K deficient hemorrhagic disease occurring after the first week of life, usually in premature infants up to about four months of age.¹⁴ When this happens, certain predisposing factors are usually present. Chronic diarrhea and/or long-term broad spectrum antibiotic therapy may deplete the gut flora.

INADEQUATE INTAKE

Vitamin K intake is inadequate if the infant is receiving only intravenous feedings. It may also be inadequate if the infant is on a formula with a vitamin K content less than that of cow's milk. In particular, some milk substitute formulas best tolerated by infants with chronic diarrhea have a relatively low vitamin K content. The vitamin K content in these formulas is sufficient in a healthy baby, but may not be adequate in the face of an inadequate bacterial gut flora. Breast milk is also low in vitamin K. Table 5 lists the vitamin K content of some commonly employed formulas. Apparently, vitamin K deficiency beyond the first week of life develops only when low intake and low intestinal supply co-exist. Supplemental vitamin K should be administered to infants who have diarrhea and/or are receiving antimicrobials if the dietary intake of vitamin K is low. This prophylactic vitamin K may be administered orally or intramuscularly. A dosage of 0.1 mg. per day is probably more than adequate.

DRUG INTERFERENCE

Note should be taken also of the fact that in mothers taking Dicumarol, the anticoagulant crosses the placenta and may cause hemorrhage in the newborn and possibly in utero. Dicumarol's anticoagulant effect is exerted through interfering with vitamin K utilization. Maternal heparin does not cross the placenta. Hemorrhage occurs in some infants born to mothers on anticonvulsant drugs.¹⁵ This is apparently due to drug interference with vitamin K synthesis.

Recent reports suggest that intravascular coagulation (I.V.C.) may be triggered in the new-

born by some of the same stimuli (i.e. sepsis, shock) which can cause I.V.C. in the older child.¹⁷ There have been occasional reports of an infant with coagulation defects born to a mother with "acute defibrination" syndrome.

In I.V.C., multiple coagulation deficiencies (platelets, prothrombin, V, VIII and fibrinogen) develop, due to the fact that these coagulation factors are consumed in clotting. Undoubtedly I.V.C. can occur in the newborn period and, if recognized, might be successfully treated with heparin. However, in view of the "normally" precarious coagulation mechanism in the immature infant, predisposing to multiple coagulation factor deficiencies, the difficulty in rapid, accurate diagnosis of I.V.C. in these infants can be readily appreciated. Heparinization would perpetuate bleeding in the hemorrhagic syndromes other than I.V.C. Few studies have been done to investigate I.V.C. in the newborn period. It is apparent that more work needs to be done in this field before definitive suggestions can be made.

Table 6 presents a laboratory screening approach to the differential diagnosis of hemostatic defects in the newborn. When a blood sample is drawn for coagulation studies from a newborn suspected of having a hemostatic defect, the blood should not be obtained from a femoral or a neck vein, since prolonged oozing from these areas may be hazardous. A small sample can usually be obtained from an antecubital or scalp vein by using a "Butterfly" infusion set and syringe for blood withdrawal.

TRANSFUSION AXIOMS

When transfusion is required during the newborn period, the following points should be kept in mind:

Acute blood loss is best replaced with whole blood, dosage not to exceed 20 ml./kg. in one transfusion. Chronic blood loss is best replaced with packed cells, dosage not to exceed 10 ml./kg. in one transfusion. Anemia from hemolysis is best corrected with packed cells. If the hemolysis has resulted in significant hyperbilirubinemia, exchange transfusion with fresh whole blood may be required (to be discussed in a subsequent article in this series). If transfusion is required for bleeding secondary to a plasmatic coagulation defect, fresh (less than three hours old) blood or plasma should be used. If one uses

fresh blood to transfuse a patient with a coagulation defect, that blood should not be collected in heparin.

Blood given to a neonate should be cross-matched against both maternal serum and the baby's red cells and serum. If, in a true life-threatening emergency, this crossmatching is impossible, blood from the mother may be given to the baby or blood from an O negative donor may be administered. ★★★

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Radiologic Seminar C

Roentgen Diagnosis of Anencephaly in Utero

SAM LEVI, M.D.
Ocean Springs, Mississippi

WHEN PRESENTED with a patient who has enlarged out of proportion to the duration of pregnancy, the physician frequently orders an x-ray study, to differentiate between twins and hydramnios. Since hydramnios is frequently associated with fetal abnormality, it is important to carefully study the fetal skeleton. One of the most common monstrosities is anencephaly, fortunately, the diagnosis is usually simple, namely an absence of the vault of the skull, but presence of facial bones and an unusual cluster of small dense masses in the region of the base, as well as an apparently short neck.

An error in diagnosis can occur when the film is exposed during fetal movement and the entire skeleton is essentially blotted out. Abnormally active, and when manually palpated, convulsive fetal movements have been described as important presumptive signs of anencephaly.

The patient, age 23, gravid 4, para 3, was referred by Dr. E. M. Baumhauer for roentgen studies because of suspected hydramnios. The technician made anteroposterior and lateral studies and called the films to my attention because no fetal skeleton was apparent. Recalling another

case when no fetal skeleton was evident on the initial study, but present on repeat films, I questioned the patient as to whether the baby moved during x-ray exposure. She replied "Yes, it was turning summersaults," and added that this was the most active of her babies.

The patient was then informed that fetal movement blurred the picture and was instructed to state when the baby was quiet for a repeat study. Additional films showed typical anencephalic deformity. A live 3 pound, 3 ounce female fetus was delivered one week later after elective induction.

SUMMARY

1. Anencephaly is frequently associated with hydramnios.
2. Unusually active fetal movements should arouse clinical suspicion of anencephaly, particularly if the patient has had a previous monster.
3. Absence of cranial vault, a cluster of small dense masses with facial bones and apparently short neck is characteristic.
4. A rare source of error can be avoided by instructing the patient to inform the technician if fetal movement is present during x-ray exposure.

Sponsored by the Mississippi Radiological Society.



Figure 1. AP abdomen reveals faint smudge in maternal pelvis which should arouse one's suspicion.



Figure 2. Typical appearance of anencephaly. Note closed arrow pointing to well-developed femur and lower open arrow pointing to deformed skull.

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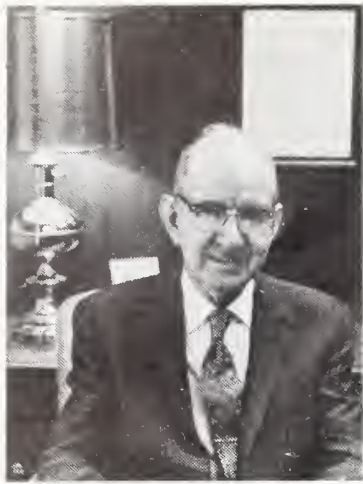
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ACADEMIC DISADVANTAGED

A bearded, sweat shirt-clad hippy type pushed his loaded shopping cart into the express check lane where the sign offered service for "six or fewer packages."

The supermarket checker looked at the full cart and asked:

"Are you one of those MIT students who can't read or just a Harvard student who can't count?"



The President Speaking

'Growing Pains'

PAUL B. BRUMBY, M.D.
Lexington, Mississippi

The MSMA was asked to appear before the legislative investigating committee to explain why in our opinion only \$7.8 million of the \$17 million appropriation to Medicaid for its first six months of operation was not spent. The return of this money, 83 per cent of which was from federal sources, has caused much publicity.

The Medicaid operation is extremely complex, interrelating with the Welfare Department which must certify eligibility, the Medicare program, a federal operation which through Travelers pays the provider of services for those on Old Age Assistance except the deductibles which are paid through Medicaid. Medicaid had less than three months to implement the whole Medicaid program, although a fiscal agent had neither a staff nor hardware to effectively support this program.

The Medicaid commission consisting of four members of the legislature and three outstanding citizens with the staff headed by an outstanding medical association member had to start from scratch, but to show its growth the fiscal agent received 5,000 claims in its first month of operation. In July they received 37,000 claims and claims from over 68 per cent of the Mississippi physicians who are in private practice. It was only in February that the 86,000 dependent children could be added to its roll, and it was only in July that the tremendously expensive drug program could be implemented. They received over 100,000 prescriptions during July. The nursing home program, usually accounting for 43 per cent of expended funds is still not off the ground. The \$250.00 a month limitation on payments will not buy nursing home care. The reports show the physician to have received 39 per cent of the total payout, with little explanation of the cause of this. The first program implemented was for direct medical care and provider services were paid, but of the \$3,242,000.00 supposed to have gone for physicians services, \$1,611,000.00 was paid as a buy-in to Part B of Medicare with all of its various programs. How much of this was paid to providers of medical care we do not know.

Medicaid is improving and we hope it will continue to improve. This is a state program we can talk to, we can suggest, we can criticize, but remember Medicare only tells us. Medicaid is having growing pains but it is maturing. ★★★



Medical Care Foundations: Private Delivery That Works

I

HEALTH CARE DELIVERY has become as much of an American household word as Spiro Agnew, environment, and ecology. The President of the United States has characterized the delivery system as being in a state of crisis. Most of its critics—and they abound aplenty throughout the land—say that it is no system at all but rather a cottage industry. Still other voices charge that the delivery system is unorganized, a maze of independent, yet somehow related, fragments.

None of this is all true, but American medical leadership readily concedes that the system faces severe challenges. Perhaps Dr. James L. Royals of Jackson, the association's 1969-70 president, summed it up with greater candor and conciseness than others when he said that the system "is on trial."

"I do not claim perfection for our care delivery system," Dr. Royals said in his presidential address to the 102nd Annual Session. Confessing discomfort with change, he pointed out with frankness that "we must recognize that we are living in a dynamic time, a time of rapid and dramatic change, of new and varied social forces, of miraculous technology, and of troubled political balance in a volatile world."

But the change of which medicine's leaders as well as its critics speak may not be so drastic after all. In fact, say many who are awakening to something which we have largely ignored, the change is of medicine's making, and it is already here.

The name of the change is the medical care foundation which happens to be alive and well and delivering medical care in half a dozen states to nearly 2 million Americans.

II

Born in California, the birthplace of so many innovations in care financing and delivery, the medical care foundation is a creature of medical organization and private practice. As such, one could think it suspect as being just another production model of the system's guild for perpetuation of the cottage industry.

Not so, say a million Californians who are free to choose their physician and receive the care which his professional judgment dictates.

Not so, say private and insurance companies and voluntary prepayment plans which are picking up the tab with a great deal more enthusiasm than in before-foundation times.

Not so, say consumer and employee representa-

tives groups, unions to most of us, who find that the guarantee of care delivery is being honored.

Not so, say governmental agencies charged with administration of tax-supported medical care programs who find their costs predictable and their actuarial planning sound.

The medical care foundation is a voluntary, nonprofit membership organization incorporated under the sponsorship of a medical association. Its owners are physicians; its members are physicians; and its bosses are physicians elected to office by physician-members.

The MCF has four simple functions which are crucially important in all the sound and fury about medical care in America today:

- It provides the means for the medical profession to assume direct responsibility for and leadership in the delivery of medical care. How? By overseeing services provided by its own.

- The MCF receives and processes claims for professional services, and in most cases, makes payment within a preagreed frame of just and equitable fee ranges.

- It conducts peer review which is to say that physicians oversee their own houses.

- And it sponsors utilization review, making certain that expensive and sometimes scarce facilities are optimally employed at maximum possible efficiency.

A medical care foundation is served by a skilled staff under the supervision of its physician-members, mostly within the structure of the sponsoring medical association. These workers generally include medical executives experienced in care plan administration, claims adjudicators and processors, data processing personnel, and those skilled in accounting and statistical services.

III

What a medical care foundation *is* and *is not* counts for everything in understanding the nature of the critter. Every MCF organized to date has as its purposes at least these five salient goals:

- To promote, develop, and encourage the distribution of medical services to the area it serves at a cost which is just and equitable to patient and physician.

- To preserve freedom of choice both to patient and physician.

- To guard, preserve, and foster the physician-patient relationship in the traditional, time-honored sense.

- To protect the public health.

- And to work cooperatively with private in-

surance, voluntary prepayment, and tax-supported medical care plans to provide for periodic and realistic budgeting of just and proper costs.

A medical care foundation is *not* a union. It doesn't bargain professional fees nor is it a closed shop where nonmember physicians are out in the cold world of lay-sponsored care programs left to shift for themselves. The MCF does not and cannot affect the membership status of any physician, a feature implicit in the Mississippi State Medical Association's peer review policies adopted by the House of Delegates this year. It does *not* and *cannot* affect the right of any physician to practice medicine.

A medical care foundation is *not* an insurance, prepayment, or government medical care program. As such, it doesn't have a dime of its own, except for at-cost charges made for its services and possibly some nominal dues barely sufficient to sustain the skeleton administrative functions of minutes-keeping and the like. The MCF draft authority for paying out professional fees under peer and utilization review by physicians is a responsibility it is willing to assume. And it makes a stern stewardship accounting for this function, as it does for all its activities.

A medical care foundation is *not* the answer to every problem facing the health care delivery system today, but it *is* a system and one that works quite well in the hands of serious, honorable members of the medical profession.

Membership in the MCF by physicians is voluntary, and all foundations require annual renewal by application. The organization is governed by a Board of Trustees elected by the voluntary membership, and there are committees for peer



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review, utilization review, membership, and other purposes as needs require.

The MCF is therefore an extension of the sponsoring medical association consisting of those members who desire to avail themselves of its services, joining in preserving private practice traditions while meeting the serious challenges to the care delivery system. A logical question for the uninitiated, then, is why have a foundation at all, if my medical association already administers a medical care plan and possesses the skill, expertise, trained staff, and hardware to process claims for professional services?

Why a MCF if our association has made a major commitment to peer review at state and component society levels? Why a foundation when *our* association-administered medical care plan has usual and customary fees, area and not individual fee profiles, and does all these things without another organization to join?

The answer is just as logical: The medical care foundation can do things a medical association does not ordinarily undertake and in some cases, may not. The MCF can enter into agreements with corporations, employee groups, insurance companies, care plans of every sort, and others to deliver care within a framework which is mutually acceptable. But even more than this, it stands between the provider and the third party as advocate of patient and physician.

The MCF has no fish to fry politically nor is it crusading for or against a pending proposal. The foundation takes the situation as it is and makes it work for private care delivery under physician-sponsorship and terms acceptable to all parties concerned. It does *not* retail medical care but in stock exchange language, it assures an orderly market for fair trading.

It is a health care delivery system with the best of both worlds: The world of traditional American private practice and the honored physician-patient relationship and the new world of third parties which are here to stay.

IV

Sixteen medical care foundations are going concerns in California serving nearly 1 million patients and 6,000 physicians. Statewide foundations, much better suited for less populous areas, are operational in Colorado and New Mexico. The latter are operating Medicare and Medicaid.

More statewide MCF's are on the drawing boards, late planning stages, or on the threshold of operation in Arizona, Florida, Georgia, Hawaii, Iowa, Minnesota, and New York. When the latter becomes a reality, it will be the U. S. giant, for

the Medical Society of the State of New York, the nation's biggest medical association, has long operated workmen's compensation, CHAMPUS, and a number of other medical care plans.

Once established, this array of coast-to-coast MCF's will potentially represent 50,000 practicing physicians and as many as 40 million patients. This is a substantial quantity in anybody's measure and a health care delivery system which simply cannot and will not be ignored. Its backbone is medical organization without which no foundation could be brought into being.

This success story should not be interpreted as advocacy for Mississippi, because the state medical association has not spoken officially on the medical care foundation. But it is an issue far too important to private practice for the association to ignore. Dr. Royals exhorted Mississippi medicine to be "master of its own house," calling for a serious, working peer review system. The association already possess the personnel and tools and know-how to conduct the staff work for the foundation. A commitment has existed for decades to deliver the best possible medical care to all Mississippians within the traditional frame of the honored physician-patient relationship.

It is just common sense for every physician in the state to inform himself on medical care foundations, to discuss this issue with his colleagues, to make his wishes known, and to cause his association to debate the matter.—R.B.K.

An Economic Asset of MSMA Membership

A vast majority of American physicians would just as soon meet a hungry tiger and take him on with a curette as grapple with the knotty problem of professional liability insurance. Mississippi physicians, however, have been extremely fortunate in this respect, and it is not altogether by accident, either.

In 1961, the state medical association's Board of Trustees had the foresight to recognize an incipient crisis somewhere down the line in this vital coverage. There was, almost a decade ago, a pronounced trend upward in premium costs, and the big jury awards in malpractice suits were beginning to make the news.

Regrettably, many state medical associations either failed to grasp the implication of the trend or else chose to do nothing, hoping that it, like yellow fever and pellagra, would yield to a potent economic antibiotic or vitamin and just go away.

EDITORIALS / Continued

The Mississippi association conferred with insurance carriers, their trade association then known as the National Bureau of Casualty Underwriters, and representatives of the State Insurance Commission. We found only casual interest, some indifference, and much resignation to inevitably higher premiums. This made the Board and its then-chairman, Dr. H. H. McClanahan, Jr., of Columbus, even more determined to do something, and do this they did.

An agreement was entered into with the St. Paul Companies of Minneapolis-St. Paul, a respected old line group represented by knowledgeable, aggressive agents who agreed that there was a job to do. A state medical association professional liability insurance "group" was organized in the summer of 1961.

It wasn't really a group in the classic insurance sense, because there was not then nor has there ever been any mass enrollment. Each applicant physician is written on the basis of his own merit, type of practice, and *membership in his local society, Mississippi State Medical Association, and AMA*. He need not be a fellow of any American college of this-or-that, nor does he need to be a diplomate of any board.

He purchases his coverage through a local independent insurance agent, lately of "Big I" identification, because the association has always advised physicians to buy insurance coverage locally where an established agent resides and does business. And we have said that he should buy enough insurance, because when more is needed, it usually isn't for sale!

The St. Paul professional liability program grew slowly, and at times, it appeared to be of no particular significance in terms of mass purchasing power, the reason most often advanced for having insurance groups.

But the program paid off within six months of its inception: The NBCU companies (St. Paul, although strong and reputable, has never been a Bureau company) announced a lowering of premium rates. That was just after St. Paul announced a price cut. Clearly, the trend in Mississippi was reversed.

Within two years, more than half of the states had experienced increases in professional liability insurance premiums, while, of all things to happen, the rate went down again in Mississippi. And participation in the program was growing.

The agreement has always been a two-way street: St. Paul makes a full stewardship accounting of the program to the association's

Board of Trustees, and the Board has willingly and generously given its time and know-how in advising on threatened or instituted malpractice litigation. This, of course, is the secret of the program which is no secret at all.

Developments since 1968 are part of American medicine's economic headlines. The cost of professional liability insurance has become a nightmare for nearly half of all American practitioners. A California surgeon must pay an absolute minimum of about \$4,100 for 100/300 coverage, and few are able to purchase it for that price. His Mississippi counterpart pays roughly \$600 for the same coverage.

In neighboring Alabama, new rates just announced price the surgeon's 100/300 coverage at \$1,400, and the story is about the same in most other states.

Dr. McClanahan, really the father of the present program, once said that "if the Mississippi State Medical Association had never done another thing for its members, the professional liability insurance program has been enough in dollar savings to pay all local, state, and AMA dues from here on in with profit to spare."

If this were true when Dr. McClanahan said it, how much truer it is today, because *Mississippi has the fourth lowest state professional liability insurance premium rate in the United States* by the standard insurance manual, and the St. Paul program is 10 to as much as 20 per cent below the book!



This is a program to be prized by the membership, and there are now 650 participants. Of course, there are other good and reputable insurance carriers besides St. Paul, and the association fully respects and supports them, too. We do say that the St. Paul pioneering concept and the association's far-looking action through the Board of Trustees has helped everybody.

If, as Dr. McClanahan said, for no other reason, medical association membership in Mississippi is a pretty valuable economic as well as professional asset.—R.B.K.

Like, Man, This Splits From Webster

Anybody who enjoys a wide range of contact with children, especially the marvelous teenagers of today, knows that they have an "in" language. And, man, this lingo is like so far out that one comes to be convinced that there is really no generation gap at all—just a language barrier.

A Memphis child psychiatrist, Dr. Morris D. Cohen, may just have cracked the barrier, because he has compiled a new reference source, *The Now 70's Language Dictionary*.

Nor is this a paperback for an evening's entertainment of wonder about "black widow" for methamphetamine or "speed" for methadone. The book isn't groovy for the sake of finding out what "third world" people think and do. It is an honest-to-goodness scholarly work about how this sometimes unbelievable generation communicates.

No less distinguished body than the Council on Child Health of the American Academy of Pediatrics considered the book at its summer meeting in Chicago. Says the AAP Newsletter, "The publication is being recommended to pediatricians as a valuable information source of current teenage terminology and word usage."

The report continues that "Dr. Cohen has written his book as an aid to physicians, parents, and other interested adults who find it essential to be alerted to specific verbal danger signals when communicating with teens on their own level."

Now, there are some cynics who might take exception to this purposeful pronouncement, but the idea is not only intriguing but downright practical. We congratulate Dr. Cohen for his obvious resourcefulness, perseverance which needs no accolade, and willingness to bring an idea to fruition which might frighten a lesser person into mild shock.

Like, man, this splits from Webster, so there is hope that some of us may become bilingual after all.—R.B.K.

Antisubstitution Kill Is a Crooked Straw

There is a crooked straw in the wind which has attracted little attention. But it has the potential of a log in a hurricane in patient care and the professional prerogatives of the practicing physician. At its Washington, D. C., convention, the American Pharmaceutical Association voted to seek repeal of state antisubstitution drug laws.

As with the iceberg, only a little of the whole shows above the surface of the water. The APhA pronouncement seems mild and simple enough: "Repeal of antisubstitution laws would not disturb the existing prescriber-pharmacist relationship or deprive the prescriber of the right to insist that a particular drug product be dispensed. . . . Repeal would simply act to remove the state as a decision-maker in the prescribing and dispensing of medication."

But that's just the top of the iceberg. APhA has long clamored for more professional status for the pharmacist. He should, they argue, be the therapeutic member of the health care team. Generally, these arguments are based on these tenuous premises:

—Pharmacists, not physicians, are the real drug experts.

—Pharmacists spend more time in pharmacology than doctors so they (pharmacists) should select the drugs for the patient.

—Physicians should only make the diagnosis and let the pharmacist handle the therapy.

Now, it is difficult to believe that even a substantial minority of pharmacists really believe this line of tortured logic. Of course, the profession of pharmacy has changed over the years, as has every other health profession. Schools of pharmacy have six-year curricula, and the training is solid and substantial.

But pharmacists do not treat patients, nor do they possess the qualifications to select a therapeutic agent on the basis of a diagnosis. It doesn't take a medical education to understand this. Antisubstitution laws are on the statute books for other very good reasons, too, more, in fact, than the matter of brand name vs. generic designation or those of mere pricing of the drug product.

There is the matter of liability, not just for the pharmacist but also for the physician who is al-

BREAKUP — symbol of the impact of emotional stress
But when the stress exceeds transient rage or
depression — and settles into a chronic mixed anxiety
depression state — combined tranquilizer-
antidepressant therapy could be indicated.



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INDICATIONS: Patients with moderate to severe anxiety and/or agitation and depressed mood; patients with depression in whom anxiety and/or agitation are severe; patients with depression and anxiety in association with chronic physical disease; schizophrenics with associated depressive symptoms.

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; pregnancy; and in patients with known hypersensitivity to phenothiazines or amitriptyline. Do not give in combination with MAOI drugs because of possible potentiation that may even cause death. Allow at least two weeks between therapies. In such patients therapy with TRIAVIL should be initiated cautiously, with gradual increase in the dosage required to obtain a satisfactory response. Do not give concomitantly with guanethidine or similarly acting compounds since it may block the antihypertensive effect.

WARNINGS: Patients should be warned against driving a car or operating machinery or apparatus requiring alert attention, and that response to alcohol may be increased.

PRECAUTIONS: Suicide is always a possibility in mental depression and may remain until significant remission occurs. Supervise patients closely in case they may require hospitalization or concomitant electroshock therapy. Untoward reactions have been reported after the combined use of antidepressant agents having various modes of activity. Accordingly, consider possibility of potentiation in combined use of antidepressants. Use with caution in patients with glaucoma and those with problems of urinary retention. Perphenazine can lower the convulsive threshold in susceptible individuals. It should be given with caution to patients with convulsive disorders. Dosage of the anticonvulsive agent may have to be increased. Not recommended for use in children. Mania or hypomania may be precipitated in manic-depressives (perphenazine in TRIAVIL seems to reduce likelihood of this effect). If hypotension develops, epinephrine should not be employed, as

its action is blocked and partially reversed by perphenazine. Caution patients about errors of judgment due to change in mood.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Should not be used indiscriminately. Use caution in patients who have previously exhibited severe reactions to other phenothiazines. Likelihood of untoward actions greater with high doses. Closely supervise with any dosage. Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonos, oculogyric crisis, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs; and/or by reduction in dosage, but sometimes persists after discontinuation of the phenothiazine; skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; EKG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dryness of the mouth, headache, nausea, vomiting, constipation, obstipation, urinary frequency, blurred vision, nasal congestion, and a change in the pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude; muscular weakness; mild insomnia. Other adverse reactions reported with various phenothiazine compounds, but not with perphenazine, include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis, grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation). Significant unexplained rise in body temperature may suggest intolerance to perphenazine, in which case discontinue. Antiemetic effect may obscure signs of toxicity due to overdosage of other drugs or make diagnosis of other disorders such as brain tumors or intestinal obstruction difficult. May potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: Careful observation of all patients recommended. Side effects include drowsiness (may occur within the first few days of therapy); dizziness; nausea; excitement; hypertension; fainting; fine tremor; jitteriness; weakness; headache; heartburn; anorexia; increased perspiration; incoordination; impotence; increased appetite and weight gain; allergic-type reactions manifested by skin rash, swelling of face and tongue; itching; numbness and tingling of limbs, including peripheral neuropathy; activation of latent schizophrenia (however, the perphenazine content may prevent this action in some cases); epileptiform seizures; temporary confusion, disturbed concentration, or transient visual hallucinations on high doses; evidence of anticholinergic activity, such as tachycardia, dryness of mouth, stomatitis, blurring of vision, reversible dilatation of the urinary tract, urinary retention, constipation, paralytic ileus; agranulocytosis; jaundice. Elderly patients and adolescents can often be managed on lower dosage levels.

For more detailed information, consult your MSD Representative or see the package circular. Merck Sharp & Dohme Division of Merck & Co., Inc., West Point, Pa. 19486.

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ways finally responsible for his diagnosis and treatment. There is the matter of implied warranty, of what the drug selected is and is not, and what side effects the so-called identical agent might produce.

We respect the profession of pharmacy and point out that its contributions to health care have been magnificent. We do not level the charge of "merchant" instead of professional at the pharmacist, nor do we degrade his calling in any sense. But we do say that he fostered and shaped his profession and that he has no rational basis for entering a new one now. Unless, of course, he cares to go on to secure his M.D. when antisubstitution laws will then make no difference at all.—R.B.K.

Profile of Our Children, A Teenage Nation

For the first time in its 70 years of history, the decennial White House Conference on Children and Youth will be divided into two sessions. The first, a Conference on Children, is scheduled Dec. 13-18, 1970, at Washington, while the second stage, the Conference on Youth, will open in Feb. 1971.

The conclave on children will focus on the age range of infancy through 13 years, while the youth segment will relate to ages 14-24. There is logic in the division, and profile of American children proves the point.

In this nation of some 205 million, there are 53.3 million children under 14 years of age. They are, for all intent and purpose, the baby boom of the post-World War II baby boom. And this is a growth in this age grouping from 30 million in 1940, almost double.

The demographers tell us that this growth results from a geometric phenomenon of reproduction: From 1941 through 1966, the number of births each year exceeded the number of children reaching their 14th birthdays.

Just over half of our children are boys, and their proportion remains static at about 51 per cent in ages 10 through 13. Racial composition of our population, however, varies with age, and the proportion for nonwhites declines from 17.2 per cent of the children under age 5 to 14.4 per cent at the 10 through 13 bracket.

If only demographically, the division of the White House Conference makes sense, because the population segment to be considered is substantial, significant, and in fact, our next generation.—R.B.K.



POSTGRADUATE CALENDAR

MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

Now in its second year, the Mississippi Postgraduate Institute in the Medical Sciences has accepted another class of 20 Mississippi physicians, bringing the total to 40. Last year's curriculum of eight one-week refresher courses has been expanded to 15 to accommodate the enrollment growth. With the exception of cancer chemotherapy, each of the original courses will be offered twice this year, with registration again limited to five in each course. Participating physicians who complete 440 hours in a four-year program will receive a certificate of excellence. The Mississippi Regional Medical Program supports the Mississippi Postgraduate Institute in the Medical Sciences, which is sponsored by the University of Mississippi School of Medicine in cooperation with the Mississippi State Medical Association. Early fall courses are:

November 2-6

ELECTROCARDIOGRAPHY INTENSIVE COURSE
University Medical Center, Jackson
November 2-6, 1970, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:

Thomas M. Blake, M.D., professor of medicine, The University of Mississippi School of Medicine

Designed for the practitioner who uses electrocardiography in daily rounds but who has had little formal training in the subject, this one-week intensive course will utilize demonstrations, lectures, discussions and conferences. Participants will study disorders of cardiac mechanism, introventricular and atroventricular block, manifestations of coronary artery disease and ventricular balance.

November 2-6

RADIOLOGY INTENSIVE COURSE
University Medical Center, Jackson
November 2-6, 1970, beginning at 8 a.m.

POSTGRADUATE / Continued

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:

Robert D. Sloan, M.D., professor of radiology and chairman of the department, The University of Mississippi School of Medicine

This one-week intensive course will include practical observations of radiologic procedures in the diagnostic, therapeutic and isotope areas, as well as sessions dealing with equipment, techniques, artefacts and radiation safety. Diagnostic conferences will enable registrants to understand both the value and limitations of clinical radiology and the practical points of radiographic interpretation.

November 9-13

GASTROENTEROLOGY INTENSIVE COURSE

University Medical Center, Jackson
November 9-13, 1970 beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:

Lidio O. Mora, M.D., associate professor of medicine, The University of Mississippi School of Medicine, and chief, division of gastroenterology, The University of Mississippi Medical Center and the Jackson Veterans' Administration Center

This one-week intensive course, a practical view of gastroenterology, will cover conditions most commonly seen in the current office practice of medicine, with particular emphasis on endoscopy of all kinds. Registrants will participate in rounds, lectures and seminars.

November 9-13

PEDIATRICS INTENSIVE COURSE

University Medical Center, Jackson
November 9-13, 1970, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinators:

J. M. Montalvo, M.D., associate professor of pediatrics, The University of Mississippi School of Medicine

Nell J. Ryan, M.D., associate professor of pedi-

atrics, The University of Mississippi School of Medicine

The lectures in this one-week intensive course will emphasize fluids, hematology, cardiology, immunizations, allergies, seizures, pediatric emergencies, pediatric surgery, renal problems and care of the newborn. Participants will sharpen their skills in scalp vein techniques, and in the use of the humidifier, respirator, nebulizer and resuscitator.

CIRCUIT COURSES

NORTHERN CIRCUIT

Tupelo—September 22—Session 1; October 20—Session 2; November 17—Session 3, North Mississippi Medical Center, 7 p.m.

Greenville—October 22—Session 1; October 29—Session 2; November 5—Session 3, Greenville General Hospital, 8 p.m.

Session 1—Private Care for Patients with Tuberculosis, Dr. Guy Campbell
Surgical Practices in the Management of Tuberculosis, Dr. Karl Stauss

Session 2—Back Pain
Neurological Approach, Dr. Armin Haerer
Neurosurgical Approach, Dr. Robert R. Smith

Session 3—Modern Management of RH Sensitization
In the Mother, Dr. Calvin Hull
In the Infant, Dr. Alfred Brann

SOUTHWEST CIRCUIT

McComb—October 13—Session 1, Southwest Mississippi General Hospital, 7 p.m.

Natchez—October 20—Session 1, Jefferson Davis Memorial Hospital, 7:30 p.m.

Session 1—Management of Congenital Heart Disease, Dr. David G. Watson
Ischemic Heart Disease, Dr. Patrick Lehan

SOUTHEAST CIRCUIT

Pascagoula—November 10—Session 1, Singing River Hospital, 6:30 p.m.

Session 1—Current Trends in the Management of Septic Shock, Dr. William A. Neely
Management of Breast Lumps, Dr. James Spell

EASTERN CIRCUIT

Columbus—November 24—Session 1, The Downtowner Motor Inn, 6:30 p.m.

Session 1—Surgical Aspects of Urinary Tract
Trauma, Dr. W. Lamar Weems
Topic to be announced, Dr. Tom Kilgore

January 6, 1971
CIRCUIT COURSE, BILOXI

January 7, 1971
CIRCUIT COURSE, HATTIESBURG

January 11-15, 1971
NEUROLOGICAL DISEASES AND STROKE IN-
TENSIVE COURSE

January 12, 1971
CIRCUIT COURSE, McCOMB

January 18-22, 1971
CANCER CHEMOTHERAPY INTENSIVE COURSE

February 1-5, 1971
ELECTROCARDIOGRAPHY INTENSIVE COURSE

February 3, 1971
CIRCUIT COURSE, GULFPORT

February 4, 1971
CIRCUIT COURSE, HATTIESBURG

February 16, 1971
CIRCUIT COURSE, NATCHEZ

February 18, 1971
NEUROLOGY SEMINAR

February 23, 1971
CIRCUIT COURSE, COLUMBUS

March 1-5, 1971
GASTROENTEROLOGY INTENSIVE COURSE

March 3, 1971
CIRCUIT COURSE, BAY ST. LOUIS

March 4, 1971
CIRCUIT COURSE, HATTIESBURG

March 5, 1971
RENAL SEMINAR

March 8-12, 1971
NEPHROLOGY INTENSIVE COURSE
CARDIOLOGY INTENSIVE COURSE

March 9, 1971
CIRCUIT COURSE, MERIDIAN

April 5-9, 1971
PEDIATRICS INTENSIVE COURSE

April 6, 1971
CIRCUIT COURSE, MERIDIAN

April 13, 1971
CIRCUIT COURSE, McCOMB

April 19-23, 1971
RADIOLOGY INTENSIVE COURSE

FUTURE CALENDAR

September 11-12, 1970
OPHTHALMOLOGY SEMINAR

September 22, 1970
CIRCUIT COURSE, TUPELO

October 13, 1970
CIRCUIT COURSE, McCOMB

October 20, 1970
CIRCUIT COURSE, TUPELO
CIRCUIT COURSE, NATCHEZ

October 20-22, 1970
MISSISSIPPI ACADEMY OF GENERAL PRACTICE

October 22, 1970
CIRCUIT COURSE, GREENVILLE

October 29, 1970
CIRCUIT COURSE, GREENVILLE

November 2-6, 1970
RADIOLOGY INTENSIVE COURSE
ELECTROCARDIOGRAPHY INTENSIVE COURSE

November 4, 1970
PULMONARY SEMINAR: THE PCLOT THAT
KILLS

November 5, 1970
CIRCUIT COURSE, GREENVILLE

November 9-13, 1970
GASTROENTEROLOGY INTENSIVE COURSE
PEDIATRICS INTENSIVE COURSE

November 10, 1970
CIRCUIT COURSE, PASCAGOULA

November 17, 1970
CIRCUIT COURSE, TUPELO

November 24, 1970
CIRCUIT COURSE, COLUMBUS

November 30-December 4, 1970
NEUROLOGICAL DISEASES AND STROKE IN-
TENSIVE COURSE
CARDIOLOGY INTENSIVE COURSE

December 7-11, 1970
NEPHROLOGY INTENSIVE COURSE

December 7, 1970
CIRCUIT COURSE, HATTIESBURG

December 11, 1970
GYNECOLOGIC AND OBSTETRICAL INFECTIONS
SEMINAR

POSTGRADUATE / Continued

April 20, 1971

CIRCUIT COURSE, NATCHEZ

April 27, 1971

CIRCUIT COURSE, COLUMBUS

May 3-6, 1971

MISSISSIPPI STATE MEDICAL ASSOCIATION

May 11, 1971

CIRCUIT COURSE, MERIDIAN



NEW MEMBERS

BARRY, ESTHER GARCIA, Pascagoula. Born Santa Clara, Cuba, Dec. 21, 1926; M.D. University of Havana School of Medicine, Cuba 1953; Interned Sacred Heart Hospital, Pensacola, Florida, one year; Pediatrics residency, Mobile General Hospital, Mobile, Alabama July 1956-June 1957 and July 1967-June 1969; elected Aug. 1970, Singing River Medical Society.

HUMPHREY, CHARLES ROOSEVELT, JR., Fayette, Born Egypt, Miss. April 24, 1932; M.D., Meharry Medical College School of Medicine, Nashville, Tenn., 1961; Interned George W. Hubbard Hospital, Nashville, Tenn., one year; elected August 1970, Adams County Medical Society.

PANDEY, SHANTI, Fayette. Born India Sept. 3, 1935; M.D. Prince of Wales Medical College Patna University, Patna, Bihar, 1958; Interned, Same, one year; Master of Surgery in Ob-Gyn, Same, Sept. 8, 1965-Dec. 1, 1967; elected August 1970, Adams County Medical Society.

VESA, ANTONIO GREGORI, Biloxi. Born Cuba Feb. 16, 1915; M.D. University of Havana School of Medicine, Cuba, 1943; Interned Calixto Garcia Hospital, Havana, Cuba, one year; Ophthalmology residency Cuba 1947-1949; Ophthalmology residency 1961-1962; Ophthalmology residency Cobb Memorial Hospital, Phenix City, Ala., 1963-1964; elected August 1970, Coast Counties Medical Society.



DEATHS

TOWNS, SHERROD ROSS, M.D., Vanderbilt University School of Medicine, Nashville, Tennessee, 1904; died August 10, 1970, age 94.

Genetics Course Slated for November

Genetics for the internist will be the topic of an American College of Physicians postgraduate course scheduled for Nov. 11-13, 1970, at the New York Hospital-Cornell Medical Center, New York City.

Co-directors are Drs. Alexander G. Bearn and E. Lovell Becker. Minimum number of registrants is 35 and the maximum is 100.

The course will emphasize the clinical aspects of human genetics particularly pertinent for the practicing internist. The course will comprise formal lectures, panel discussion, case presentations and question and answer periods.

Heart Association Plans Scientific Meet

Forms to register for the 43rd annual Scientific Sessions of the American Heart Association may now be obtained through the Association's National Office or from local Heart Associations.

The meeting is being held from Thursday morning, Nov. 12 through Sunday noon, Nov. 15 in Convention Hall, Atlantic City, N. J. Seven programs on Clinical Cardiology and concurrent sessions on various phases of cardiovascular research and medicine, will be presented. In addition, the meeting will feature lectures, panels symposia and the screening of recently produced cardiovascular films.

On Thursday evening, Nov. 12, a series of Cardiovascular Conferences will be devoted to small group discussion of CV problems. A special "Meet the Expert" session will be held on Saturday evening, Nov. 14 for talks on a variety of cardiovascular topics.

As in the past, scientific and industrial exhibits will be displayed throughout the meetings. Industrial exhibit space may be obtained through Steven K. Herlitz, Inc., 850 Third Ave., New York, N. Y. 10022.



New, Beefed-Up Legislative Program Will Ask Active Aid of All Members

"Give a day for MSMA!"

This is the appeal to every member in behalf of the new and expanded legislative program adopted by the House of Delegates, reviewed by the Board of Trustees, and now being implemented by the Council on Legislation.

Dr. C. D. Taylor, Jr., of Pass Christian, chairman of the legislative body, said that the first objective of the new program is involvement of every association member.

"The most serious business before our last annual session," Dr. Taylor observed, "was the series of legislative crises we experienced during the 1970 Regular Session.

"It is a matter of physician-to-legislator communication, and many senators and representatives have made it clear that they wish to hear from hometown physicians on a week-to-week basis."

He said that the "Give a Day" program, formally approved by the House of Delegates, will ask each association member to devote one day—not a Saturday or Sunday—to work in behalf of the association's legislative program.

Dr. Taylor said that "only 65 to 70 physicians can serve as Doctors of the Day in our Emergency Medical Care Unit in the Capitol which is open during each working day of the legislature in regular and special sessions. The association employs a full-time R.N. in the unit.

"But we intend to call on members to visit with their own county delegations of senators and representatives, make speeches before civic and service clubs, meet with other associations having a common interest in health and medical legislation, and do special tasks in the legislative field."

Dr. Taylor said that the Council on Legislation had just held its fall meeting at Jackson and that plans are well along toward putting the program into effect.

The council also received referrals from the House of Delegates on legislative items growing

out of resolutions and reports adopted. Among these are:

—Amendments to the state's archaic abortion law to permit the procedure when the health as well as the life of the patient is at stake, when the pregnancy results from rape or incest, or when there is probability that the infant will be born deformed.

—A limited licensure law for foreign medical graduates found competent after searching examination and who work in state institutions. They would not practice privately.

—Establishing of statutory standards for all practitioners who hold themselves out to diagnose and treat disease, requiring all to meet M.D. standards.

—Support of the University of Mississippi School of Medicine in enlarging classes to increase the supply of physicians.

—Continuation of the emergency medical helicopter airlift service, Project CARE-SOM.

Dr. Taylor said that the new program will also include a weekly legislative bulletin for every member of the association.

"We intend to have a fully informed membership on health and medical legislation," he emphasized.

He said that a staff executive from association headquarters will be available at the Capitol daily.

The council reviewed the adverse series of proposals last session which prompted formulation of the expanded program. Among these issues were chiropractic licensure, dilution of the State Board of Health in one measure and another to abolish it, malpractice action awards without the need for corroborative medical evidence, licensure amendments, and proposals inimical to practice and patient care.

Dr. Taylor said that the council will meet monthly during the 1970 Regular Session of the Legislature, periodically reviewing the association's program.



PERSONALS

JERRY R. ADKINS of Biloxi announces the association of RAY L. WESSON in the practice of general and thoracic surgery at The Surgical Clinic, 1160 West Howard Avenue.

RAYMOND A. ALLEN, formerly of Phoenix, Ariz., has been appointed chief of pathology at St. Dominic-Jackson Memorial Hospital in Jackson.

S. LAMAR BAILEY and PAUL E. MINK of Kosciusko have been commended by President Richard M. Nixon for work they have done in behalf of the county draft board as medical advisors.

The Department of Medicine at the University of Mississippi Medical Center at Jackson has announced the following promotions: THOMAS M. BLAKE from associate professor to professor; MARVIN H. JETER from instructor and director of outpatient services to assistant professor and hospital assistant director for ambulatory services; KENNETH R. BENNETT from instructor to assistant professor and director of RMP coronary care facility and training program; and WILLIAM R. LOCKWOOD from assistant to associate professor.

JULIAN E. BOGGESS of Columbus announces the limiting of his practice to the eye. His office is located at 1124 Main Street.

E. V. BRAMLETT of Batesville has received a 20-year service and appreciation award from Selective Service Board No. 40. Dr. Bramlett served as local board medical advisor.

H. B. COTTRELL of Jackson, the State Health Officer, was guest speaker at a recent meeting of the Forest Rotary Club.

KARL W. HATTEN of Vicksburg has been named District Two Heart Association chairman.

J. W. HOLLINGSWORTH of Meadville was recently honored with a certificate noting his 15 years of service as a member of the Franklin County Draft Board.

GEORGE T. KIMBROUGH of Hattiesburg announces the removal of his offices for the practice of pediatrics to the Medical Arts Building at 405 South 28th Avenue.

DEWEY H. LANE of Pascagoula is serving as chairman of the Mississippi Economic Council Special Committee on Public Education which sponsored a "Stay in School" campaign in August and September.

WILLIAM E. LOTTERHOS of Jackson and WALTER CRAWFORD of Tylertown represented Mississippi at the Fourth World Conference on General Practice in Chicago. Dr. Lotterhos was one of two delegates from the United States, served as chairman of one section, and was speaker at another.

CHARLES MILLER MURRY, JR., of Oxford has been elected to the Wood Junior College Board of Trustees.

JAMES A. PITTMAN, formerly chief of surgery at Patrick Air Force Base, Fla., has joined the Rush Medical Group in Meridian.

ALLEN M. READ of Natchez announces the association of DAVID R. STECKLER in the practice of pathology.

WILLIAM H. ROSENBLATT and JAMES C. HAYS of Jackson wish to announce the association of JAMES L. CROSTHWAIT in the practice of cardiology at 1157 N. State Street.

THOMAS G. ROSS of Jackson accompanied a group of Methodist youth on a 12 day work mission in Mexico where he held a medical clinic. The mission was sponsored by the Youth Ministry Council of the Galloway Memorial United Methodist Church.

J. D. RUTHERFORD, III, announces the opening of his office for general practice at Colonial Plaza Building No. 2, Highway 90, Bay St. Louis.

THOMAS H. SIMMONS of Leland has been appointed to serve as a member of the Leland school board until an election can be held in March, 1971, to fill an unexpired term.

WILLIAM A. SWEAT, ROBERT R. GATLING, and WILLIAM F. KLIESCH, all of Jackson, have been appointed to the staff of the Jackson Veterans' Administration Center.

J. T. THOMPSON of Moss Point was elected a director of the Pascagoula-Moss Point Area Chamber of Commerce at the annual membership meeting. He will serve a three year term.

GUY T. VISE, JR., of Meridian was one of five American and Canadian orthopedic surgery residents selected as North American Travelling Fellows of the American Orthopedic Association. He toured for five weeks visiting a total of 40 major

medical institutions in American and Canadian cities.

FRED WELLS, JR., of Greenville has completed a 24-week course in aerospace medicine and has received his Naval flight surgeon wings at the Pensacola Naval Air Station.

STONEY WILLIAMSON announces the opening of his offices in Suite 106, The Medical Plaza in Hattiesburg, for the practice of ophthalmology.

DAVID T. WILSON of Louisville announces the association of ANSE B. HOWARD, III for the practice of general medicine and surgery at the Medical Center.

EENT Specialists to Meet in Las Vegas

More than 9,000 medical-surgical specialists in eye, ear, nose, and throat will assemble in Las Vegas, Nev., Oct. 5-9 for the 75th Annual Session of the American Academy of Ophthalmology and Otolaryngology.

Opening the meeting at the Convention Center will be the nation's top health official, Dr. Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs, HEW. He will address the Joint Scientific Session on Monday, Oct. 5.

The week's activities will be filled with ten scientific sessions, and with 485 instructional courses. In addition, the North Exhibit hall of the new Center will house scientific and commercial exhibits.

Ophthalmology research reports to be presented will include those on complications of surgery for retinal detachment, use of lasers to diagnose eye diseases, suitability of cadaver eyes for transplants, acquired color blindness, the use of soft contact lenses in certain eye conditions, and in chemical treatment of melanoma of the eye.

Otolaryngology research reports will include those on ear drum and ossicle transplants, the dizzying-and-ear-ringing disorder known as Mènière's Disease, congenital deafness, facial paralysis (Bell's Palsy), a special form of muscular dystrophy which affects the eyes and throat, and a one-stage operation for vocal rehabilitation of the patient whose voice box has been removed by surgery because of cancer.

A special symposium on Computer Assistance in Health Service will be featured on Monday, immediately after Dr. Egeberg's speech.

The exhibits will include 61 on the eye and 17 on ear-nose-throat. Subjects include prevention of speech problems in children with cleft palate, scanning electron microscope views of the eye's Canal of Schlemm, daily variations in eye pressure, effects of noise on hearing, chemical analysis of conjunctival mucus and its meaning for the wearing of contact lenses, nasal obstruction as a cause of sudden death in infants, use of the laser in eye refraction, use of computers in eye refraction, occurrence of virus retinitis in kidney transplant patients, and ultrasonic measurements of the eye.

The least-publicized but best-attended part of each year's AAOO convention is its instructional program, where the specialists learn the latest information and techniques in their fields. This year's courses—which run every day, morning and afternoon—are especially focused on the small: microscopic and electronmicroscopic pathology, and microsurgery—surgery on the eye and middle ear performed with the aid of microscopes.

President of AAOO is Dr. Jerome A. Hilger, St. Paul, Minn. Dr. Clair M. Kos is executive secretary-treasurer at AAOO headquarters in Rochester, Minn. Dr. Francis L. Lederer, Chicago, 1968 president of AAOO, is chairman and coordinator of the AAOO Committee for Public and Professional Relations.

Nov. 1 Is Deadline for Heart Grants

November 1, 1970 is the deadline for submitting applications for Grants-in-Aid to be awarded by the American Heart Association in the fiscal year beginning July 1, 1971.

Grants-in-Aid are made to support and expand the research activities broadly related to cardiovascular function and disease, or to related fundamental problems. Support is available for all basic disciplines, such as physiology, biochemistry and pathology, as well as for epidemiological and clinical investigations which bear on cardiovascular problems.

Limited funds are also available for support of research in the basic science disciplines which are independent of any apparent direct application to the field of cardiovascular disease.

For Grants-in-Aid applications write to the Research Department, American Heart Association, 44 E. 23rd Street, New York, N. Y. 10010.

Dr. Jenkins Honored for 50 Years of Service

Dr. W. N. Jenkins of Port Gibson was recently honored at a reception at the Claiborne County Hospital for his having served a half century in the medical profession.

On behalf of the Mississippi State Medical Association, Dr. Roy M. Barnes presented him a framed certificate as a member of the Fifty-Year Club of the association.

The certificate read as follows: "This is to certify that William Nathan Jenkins, M.D., having served his patients and fellow citizens faithfully and devotedly in the practice of medicine for fifty years and having brought honor and credit to the professional community and himself, has been elected a life member of the Fifty-Year Club, on recommendation by his component medical society. By the Board of Trustees of the Mississippi State Medical Association. This 26th day of June, 1970."



Dr. W. N. Jenkins received the coveted certificate of membership in the MSMA Fifty-Year Club from Dr. Roy Barnes of Port Gibson in special ceremonies at Claiborne County Hospital.

E. P. Spencer, hospital administrator, presented Dr. Jenkins a copy of resolutions from the hospital board of trustees in which the board praised him for his services as Chief of Staff of the hospital and for his services to the community.

C. Y. Katzenmier, representing the City of Port Gibson, presented Dr. Jenkins a silver tray as a "gift of appreciation from the people of the community."

1970-71 AMA-ERF Campaign Is Set

The 1970-71 campaign for the American Medical Association Education and Research Foundation will be opened in October. This was the announcement of Dr. Raymond F. Grenfell of Jackson, state association chairman of the Committee on AMA-ERF.

Contributions to the foundation are fully tax-deductible, Dr. Grenfell reminded, and 100 cents out of each dollar given goes to the purpose for which contributed. No deductions are made for handling or administrative costs.

Donors may earmark their gifts for a particular medical school or foundation activity. Unearmarked contributions go into the general foundation fund which is equally divided among the nation's medical schools.

"No AMA-ERF funds support the former AMA Institute for Biomedical Research," Dr. Grenfell noted. "The Institute was terminated by AMA last year.

"It is to be remembered, however," the chairman continued, "That Institute support was derived from particular gifts for that specific purpose when the project was in operation."

As in previous years, the state medical association is working in concert with the University Medical Center and the Ole Miss Medical Alumni Association in the 1970-71 campaign. The partnership offers participating physicians and Woman's Auxiliary members several avenues through which to make contributions.

UMC and the medical alumni association will again make direct appeals for voluntary support, as will the state medical association. The new single, itemized billing statement for dues will also permit inclusion of the physician's AMA-ERF gift in the single check. The amount voluntarily specified will be transmitted to AMA-ERF.

Remittances along with dues payments may be earmarked for a specific medical school, if desired, by simply noting the name of the institution on the returned portion of the statement.

Mississippi physicians exceeded their colleagues in Alabama, Arkansas, Louisiana, and Tennessee last year on per capita giving, but the net amount which went to the University Medical Center was smaller than in 1968, the announcement said.

The association has sponsored the annual campaign for voluntary support of medical education through AMA-ERF since 1953, and the goal of the 1970-71 campaign is to reach the highest degree of participation and net gift to medical education.



Book Reviews

Handbook of Psychiatry. By Philip Solomon, M.D. and Vernon D. Patch, M.D. 623 pages with illustrations. Lange Medical Publishers, 1969. \$7.00.

The *Handbook of Psychiatry* composed by excellent authors, Drs. Philip Solomon and Vernon D. Patch, represents an extremely well integrated and well organized volume. The handbook is quite readable and authoritative. It can serve as an exceedingly useful reference in the field of psychiatry.

The first six chapters make for good reading and give helpful hints for screening interviews. There is a good outline for mental status examinations with the primary emphasis on listening to the patient and points out that only after listening, should there be directed questions regarding suicide, hallucinations, etc.

Of particular importance is the seventh chapter, Differential Diagnostic Symptoms and Signs. In this chapter there is concise understandable meaning to much psychiatric lingo. There is also better understanding as to how a different psychiatric diagnosis can be made by different psychiatrists based on symptoms that appear dominant at any particular time the patient may be seen. The symptoms listed in chapter seven can be used as a guide toward reading the more detailed description of specific neurotic, psychotic and organic illnesses, as well as character or personality disturbances.

There is a superficial but helpful part in psychiatric treatment covering drugs, electroshock treatments, and emergency procedures. Throughout this volume are numerous suggestions as to simple methods of evaluating the severity of mental and/or emotional illness which could be most helpful in giving the general practitioner useful information as to when referrals to psychiatrists become wise and necessary. The last two pages of the book are a well documented, short cut to emergency psychiatric diagnosis and management.

GEORGE M. WILSON, M.D.

The Vitreous in Clinical Ophthalmology. By Norman S. Jaffe, M.D. 300 pages with 334 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$32.50.

The author's stated purpose is the compilation of the available scientific knowledge concerning the vitreous and the relating of this knowledge to clinical situations. This he does quite successfully. Dr. Jaffe is well qualified on this subject since he is clinical assistant professor of ophthalmology, University of Miami School of Medicine; chairman, department of ophthalmology, St. Francis Hospital, Miami Beach; attending ophthalmologist, Mt. Sinai Hospital of Greater Miami, Fla. He also teaches the course on the vitreous at the American Academy of Ophthalmology and Otolaryngology.

Dr. Jaffe follows the usual format in presenting a thorough review of the embryology, anatomy and physiology of the vitreous body. He then proceeds to the pathology and presents an excellent résumé of the Irvine-Gass Syndrome and other vitreous traction problems. There is a comprehensive discussion of the problems of cataract surgery including a review of surgical techniques designed to deal with vitreous loss at surgery and medical and surgical methods of handling post-operative hyaloid rupture and persistent corneal edema. The author gives a clear review of indications and methods for vitrectomy. The role of the vitreous in aphakic pupillary block, narrow angle glaucoma and malignant glaucoma is dealt with extensively, reviewing Shaffer's work on the posterior vitreous pool. There is a good discussion of sclerotomy and sclerochoroidal drainage procedures. Chapters on the vitreous in retinal detachment are comprehensive and well illustrated. These deal with the all too common problems of vitreous traction and some of the newer surgical methods for attacking traction bands. Transfer and replacement of the vitreous are considered.

Since the vitreous plays a vital role in diabetic retinopathy following the preliminary stage of aneurisms, punctate hemorrhage and hard exudate, there is a chapter devoted to this entity.

ORGANIZATION / Continued

In dealing with a subject such as this, with all of the pathologic involvements he has covered, Dr. Jaffe has done a commendable job of reviewing the world literature. There are profuse references as well as careful consideration of the varied opinions of several researchers. The author's bibliography is excellent. He has used many fine illustrations, fundus photographs and photomicrographs to clarify his text. This work is a worthwhile addition to any ophthalmic library and certainly helps fill a large gap in our knowledge of an extremely important issue.

THERESA L. R. BUCKLEY, M.D.

New Ovral Package Has 3-Month Supply

Wyeth Laboratories' oral contraceptive, Ovral®, is now available in a convenient "3-Pak" package containing a three-month supply.

Designed to provide maximum convenience for patients, the new Ovral 3-Pak also reflects the preference of an increasing number of physicians for prescribing a three-month supply of oral contraceptives.

The 3-Pak consists of the following: a comb-type case containing a one-month supply of Ovral; two additional months' supply; and patient information.

In addition to the new 3-Pak, Ovral continues to be supplied in a carton containing six single-cycle Pilpaks™.

Coronary Care Unit Nears Completion

Coronary care throughout Mississippi will get a boost as specialized training programs get underway at the University Medical Center, beginning in October.

Funded by the Mississippi Regional Medical Program, a six-bed coronary care unit in University Hospital, now under construction, will serve as the central demonstration and training facility for coronary care staffs across the state.

Dr. Kenneth Bennett, University CCU director and head of the statewide coronary care unit

system project, and Mrs. Elizabeth Jackson, nurse director, will be in charge.

Registered nurses who work in coronary care units or in hospitals with monitoring systems have been invited to apply for training in a series of four-week courses on care of patients with myocardial infarction and heart electrical activity disorders. Classes are scheduled in October, 1970, January and March, 1971. Physicians and other members of the Mississippi health team will also train in the unit when it is completed.

M. D. Anderson Hospital Plans Conference

"Progress in the Rehabilitation of the Cancer Patient" will be the subject of the 15th Annual Clinical Conference sponsored by The University of Texas M. D. Anderson Hospital and Tumor Institute at Houston, Nov. 19-20, 1970.

The Shamrock-Hilton Hotel will be the site of the two-day conference, co-sponsored by the Division of Continuing Education of the UT Graduate School of Biomedical Sciences at Houston.

The conference will be the first major medical meeting to offer an interdisciplinary approach to rehabilitation of cancer patients. Sessions will be devoted to problems of patients with cancer of specific sites, problems of amputees, techniques in nursing and physical therapy and aspects of psychological and social adjustments and vocational training.

Speakers representing about 20 medical and educational institutions and organizations, as well as government agencies, will participate in the program, according to Drs. John E. Healey, Jr., chairman, and Joe B. Drane, co-chairman.

The Heath Memorial Award will be presented on Nov. 19. Established in 1966, the award is conferred annually on a physician or scientist who has made an outstanding contribution to the better care of cancer patients through clinical application of basic research knowledge.

On Nov. 21 a symposium on bone tumors will be held in conjunction with the Clinical Conference. The Anderson department of anatomical pathology and the Texas Society of Pathologists will host the meeting, beginning at 9 a.m. in M. D. Anderson Hospital auditorium in the Texas Medical Center.

Pathologic, radiologic and surgical aspects of bone tumors will be discussed by a panel moderated by Dr. Paul Lund.

MPAC

AMPAC

give you IMPACT, doctor!

But make it a mutual impact, doctor, because your PAC needs you and you need your PAC. Both AMPAC and each of the 50 state PAC's are voluntary, nonprofit, unincorporated, autonomous groups whose members are physicians, their wives, and others in allied professions. Every group is bipartisan, bound by no party label. The voting record, platform, and program of a candidate—not his party—is what the PAC considers.

The basic purpose is twofold: To educate in political affairs and to provide a means through which the physician-citizen can effectively make his voice heard in the political arena. MPAC is medically oriented and medically directed by a 10 member board consisting of nine physicians and a Woman's Auxiliary representative.

With the elections behind, MPAC is looking ahead to 1971 when there will be a job to do. Make your voice count by sending your dues today, \$10 for MPAC and \$10 for AMPAC. Better send dues for your wife, too.



MISSISSIPPI MEDICAL
POLITICAL ACTION
COMMITTEE

Magazine Aims At Exceptional Parent

THE EXCEPTIONAL PARENT, a new magazine, is announced for distribution beginning in September, by the Psy-Ed Corporation, publishers. THE EXCEPTIONAL PARENT, unique among educational and professional publications, will aim "to provide practical help for the parents of children with disabilities." It will combine the knowledge of experts with the day-to-day experiences of laymen.

The magazine will deal with many issues that affect the exceptional child and will cover such topics as the role of the family, the nature and role of the various professional groups with whom the family is apt to come in contact, and the ways in which certain aids can be helpful. Information will be easily understandable, practical as well as theoretical. THE EXCEPTIONAL PARENT will also provide a means for parents to exchange ideas, share concerns, and discover new approaches to common problems.

The founders and editors of THE EXCEPTIONAL PARENT are three professional colleagues who are practicing psychologists and university professors: Lewis Klebanoff, Stanley Klein and Maxwell Schleifer.

Dr. Klebanoff is Director of the Massachusetts Department of Mental Health-Boston University School of Education Joint Center for Developmental Research, a lecturer at Harvard Medical School, and an advisor to the United States Office of Education on early childhood education for the handicapped. He was instrumental in the establishment in Massachusetts of the first statewide preschool program for children with developmental disabilities.

Dr. Klein is an Assistant Professor of Psychology at the University of Massachusetts at Boston and a former member of the Psychiatry faculty at the Boston University School of Medicine. He is Secretary of the Board of Trustees of the Massachusetts Association for Retarded Children Retardate Trust and a member of the Professional Advisory Committee of United Cerebral Palsy of Greater Boston. Formerly, Dr. Klein was heard daily on CBS radio in Boston on a program "Child Psychologist—At your Service."

Dr. Schleifer is an Associate Professor at the University of Massachusetts at Boston and Executive Director of the Warren Center for Emotion-

ally Disturbed Children. He is the former Chief Psychologist at the Douglas A. Thom Clinic for Children and the former Field Unit Director for the Judge Baker Guidance Center. He has written papers on the role of the family in the life of the educationally disabled child and alternatives to residential care for emotionally and intellectually handicapped children.

Charter subscriptions to THE EXCEPTIONAL PARENT, which will be distributed nationally, are \$6.00 a year. Further information may be obtained by writing THE EXCEPTIONAL PARENT, Box 45, Newtonville, Mass. 02160.

Neurology Seminar for Internists Set

The American College of Physicians will sponsor a postgraduate course, "Neurologic Aspects of Internal Medicine," Oct. 20-23, 1970, at Duke University Medical Center, Durham, N. C.

Dr. Stanley H. Appel is director and Dr. Albert Heyman is co-director. There must be a minimum of 50 registrants and no more than 100. Preference will be given to members of the College.

The overall emphasis in the course will be on the therapeutic approaches to the problems of neurologic dysfunction. The main teaching modes will be small discussion groups, panel discussion, and case presentations.

Chest Physicians Announce Meeting

The Southern Chapter of the American College of Chest Physicians will hold its annual scientific session on Nov. 16, 1970 at the Civic Auditorium, Dallas, Texas.

An interdisciplinary faculty will provide basic information on the principles of circulation and respiration and the application of this information to patient care.

Dr. Russell M. Nelson, Salt Lake City, Professor of Thoracic Surgery, Utah School of Medicine, is the 17th Paul A. Turner Memorial Lecturer. Dr. Nelson will discuss application of computers to medicine and surgery of the chest.



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Clinical Convention, Nov. 29-Dec. 2, 1970, Boston. Annual Convention, June 20-24, 1971, Atlantic City. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

Southern Medical Association, 64th Annual Meeting, Nov. 16-19, 1970, Dallas. Mr. Robert F. Butts, Executive Director, 2601 Highland Ave., Birmingham, Ala. 35205.

STATE AND LOCAL

Mississippi State Medical Association, 103rd Annual Session, May 3-6, 1971, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Mississippi Academy of General Practice, Annual Assembly, Oct. 20-22, 1970, Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 1435, Jackson.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Robert P. Henderson, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday, April and First Wednesday, November, 2:00 p.m., Clarksdale. Walter T. Taylor, P.O. Box 1237, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. C. Hal Cleveland, P.O. Box 1018, Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, President.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Res-

taurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. James E. Booth, Eupora, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. M. Howell, 139 Kirkwood St., Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

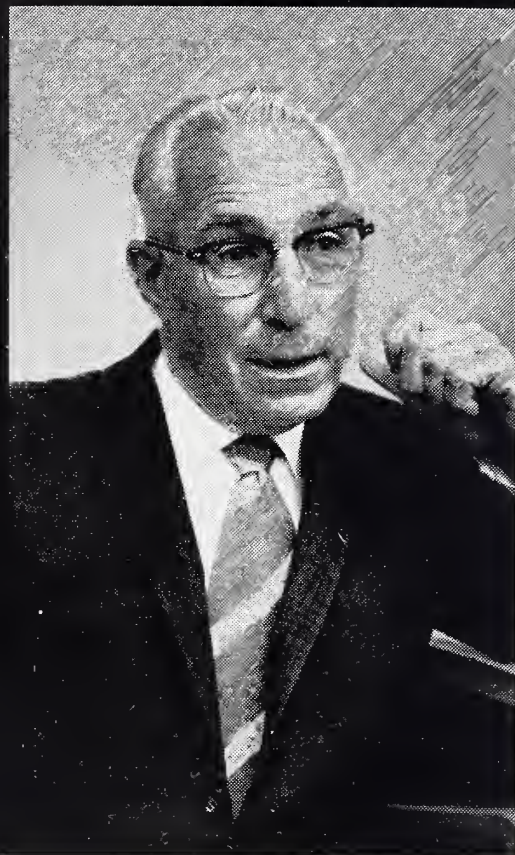
Singing River Medical Society, Third Monday, January, March, June, September, and December. Donald E. Dore, Singing River Hospital, Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. W. B. White, Medical Arts Bldg., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.

"Drug research gives me the tools that save lives."



A family doctor looks at new developments in the pharmaceutical industry. And he speculates on the future.

When I look back at some of my old records, I'm constantly reminded of the changes that have come about in medicine just during the past twenty-five years. Some of the diseases I treated and prayed over in the '40's are found mostly in medical history books now.

Thanks to drug research and development, we've made substantial gains in the control of cardiovascular disease, diabetes, malaria, mental illness, strep and staph infections, meningitis and a long list of ailments. It seems like only yesterday when a diagnosis of pneumonia was almost the kiss of death. Now, with modern medical techniques and drug therapy, we can offer some real help.

My records on polio, influenza and measles show an unbelievable trend for the better. New vaccines

have reduced the toll of these age-old threats dramatically. And I see patients in pain from crippling arthritis helped with new medicinals unknown just a few years ago.

I hear questions about the three billion or so dollars spent by the drug industry in research during the past ten years . . . working on new and better drug products. It does seem like quite a bit of money to spend, and I realize some of it goes into dead ends. That's the problem with research, any research . . . you often don't know where you're going until you get there. I want all the tools I can get to help my patients. I want more drugs and more effective drugs. If they mean less pain, longer lives and more productive careers for those I treat . . . well, that's what really counts.

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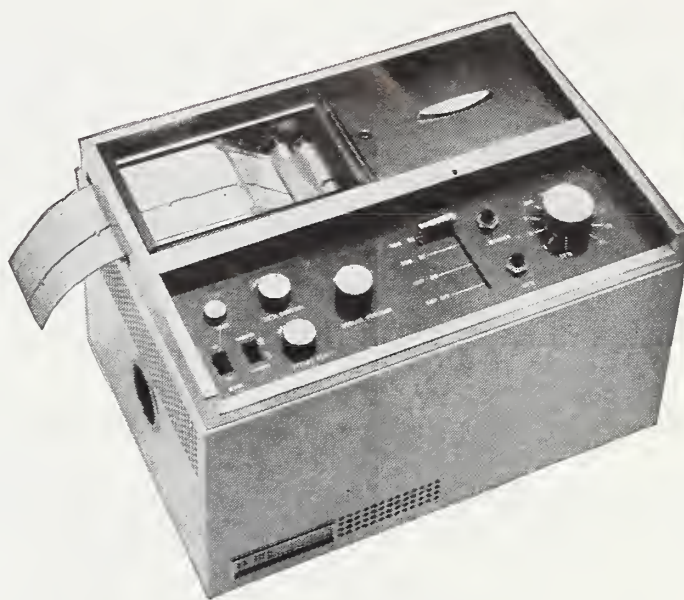
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Index to Advertisers

AMPAC, MPAC	575	Eli Lilly and Company	front cover, 18
Arch Laboratories	579	Merck, Sharp and Dohme	562, 563, 564
Becton Dickinson and Company	540A, 540B	William S. Merrell Company	second cover
Bio-Dynamics, Inc.	10A, 10B	National Drug Company	536A, 536B, 572A, 572B
Blue Cross-Blue Shield	7	Pharmaceutical Manufacturers Association	578
Breon Laboratories	8	William P. Poythress and Company	568A
Burroughs-Wellcome	560B	A. H. Robins Company	14, 14A, 14B
Campbell Soup Company	560A	Roche Laboratories	16, 17, 568B, 568C, 568D, fourth cover
The Carlton Corporation	11	G. D. Searle Company	548, 549
Hill Crest Hospital	6	Smith Kline and French Laboratories	15
Hynson, Westcott and Dunning	3	The Stuart Company	538, 539
Kay Surgical	579	Thomas Yates and Company	third cover
Lederle Laboratories	4, 12		
Leonard Wright Sanatorium	10		

IN CONCLUSION

Physicians are serving on governing boards of half of 976 short-term, nonfederal hospitals recently surveyed by AMA Council on Medical Service. In each instance, survey turned up good relations between medical staff and hospital trustees on management problems and liaison policies. Virtually every state medical association, Mississippi included, AMA, AAGP, American College of Surgeons, and even Joint Commission on Accreditation of Hospitals support move.

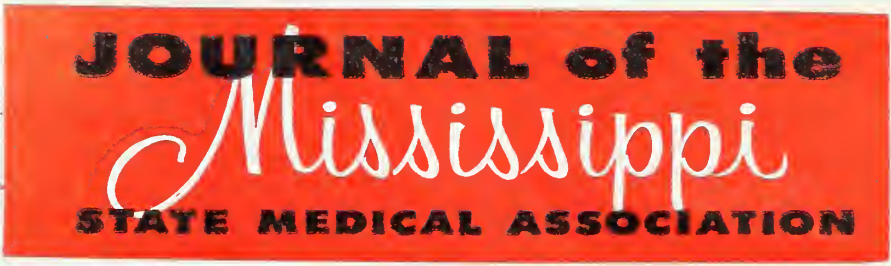
Drug procurement policies of government agencies got a going-over by Sen. Gaylord Nelson (D., Wis.) and his monopoly subcommittee. Investigation queried Department of Defense, U.S. Public Health Service, and medical arm of Office of Economic Opportunity. Thru out inquiry was emphasis on cheapest generic agents available. DO argued for quality minimums, stating that armed forces have drugs around the world in highly adverse climatic conditions.

Special emergency radio service licenses were authorized by Federal Communications Commission for local and state medical societies and for schools of medicine in recent ruling. Differing from citizen band licenses, emergency frequencies would tie medical care sources into networks for service in disasters and other critical public needs. Use of frequencies would be limited to messages pertaining to "safety of life and property" and medical duties of licensees.

Removal of all tax discrimination against the professional self-employed has been announced as an objective of Nixon administration and Internal Revenue Service. Not altogether altruistic, move seeks to eliminate need and purpose of professional corporations by permitting equal tax treatment, for example, of M.D.'s and corporate executives. One part of proposal, almost unbelievable, would be maximum of 50 per cent tax ceiling on earned professional income.

Explanation of \$40 annual AMA dues increase, directed by House of Delegates at Chicago last June, has grown to major communications campaign. Series of articles in American Medical News and special mailings to state association leadership groups are weekly project. AMA Board of Trustees initially proposed upping dues to \$150, but delegates at Chicago pared increase to \$110 from \$70 previous level. New increase is effective for 1971 with fall billings.

Volume XI
Number 11
November 1970



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CONTENTS

ORIGINAL PAPERS

- Amputations in Patients
with Peripheral Vascular
Disease **581** RICHARD WARREN, M.D.
- Surgical Emergencies of
the Newborn **585** RICHARD C. MILLER,
M.D.

SPECIAL ARTICLES

- Youth and Drugs **595** CARL E. GUERNSEY,
LL.B.
- Radiologic Seminar CI
Roentgen Changes in the
Sella Turcica in Pituitary
Tumors **600** LYNDON M. CONLEY,
M.D.

EDITORIALS

- Mississippi Peer Review:
The Practicing M.D.'s
Own Plan **603** Masters of our House
- Be Sure to Answer NORC's
Call **605** Care Cost Study
- The Passing of the Panama **606** End of an Era
- Bloody Tort: Liability
Without Negligence **607** Dangerous Doctrine
- Sen. Eastland Helps the
Chiropractors **607** Request to Reconsider

THIS MONTH

- The President Speaking **602** 'A Busted Play?'
- Medical Organization **615** CHP Study Would
Consolidate State
Agencies and Abolish
Board of Health

Dr. Chafetz Appointed Acting Director

Appointment of Dr. Morris E. Chafetz as Acting Director of the newly established Division of Alcohol Abuse and Alcoholism of the National Institute of Mental Health, Health Services and Mental Health Administration, is announced by Dr. Bertram S. Brown, Institute Director.

"The establishment of this Division," according to Dr. Brown, "signifies the intensified effort which the National Institute of Mental Health will undertake in the coming months and years to reduce the terrible toll which alcohol abuse and addiction continue to exact from our society. The programs of the Division will advance the day when we can fully understand and treat alcoholism, and prevent the misuse of alcoholic beverages through education and other techniques.

Dr. Chafetz is presently Director of Clinical Psychiatric Services of Massachusetts General Hospital, and Associate Clinical Professor of Psychiatry, Harvard Medical School. From 1957 to 1968 he was Director of the Hospital's Alcohol Clinic and from 1961 to 1968 Director of the Acute Psychiatric Services there. He has been active in alcoholism research and training throughout his career and has served on numerous al-

coholism advisory groups at the national, state and local levels.

Establishment of the new division within NIMH was announced recently by Dr. Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs, HEW. Its functions include planning and development of programs of research, training, community services, and public education for prevention and control of alcoholism; conduct and support of research on the biological, environmental, and social causes of alcohol abuse and alcoholism; support of training of professional and para-professional personnel in alcoholism prevention and control; support of the development of community facilities and services for alcoholics and other problem drinkers; and collaboration with other Federal agencies, national, State, and local organizations, and voluntary groups to facilitate and extend programs for the prevention of alcoholism and for the care, treatment, and rehabilitation of alcoholics.

The new division incorporates and absorbs the NIMH National Center for Prevention and Control of Alcoholism, which was established at the Institute in 1966.

Dr. Chafetz received his B.S. degree from Tufts College in 1944 and his M.D. from Tufts Medical School in 1948. He served his internship at the U. S. Marine Hospital, Detroit, Michigan.

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NEWSLETTER

November 1970

Dr. Doctor:

Mississippi's restrictive abortion law has been attacked on constitutional grounds of vagueness and invasion of the mother's rights. It before state Supreme Court is on appeal by a Vicksburg woman convicted of illegal abortion and sentenced to 10 years. Basis of appeal is almost identical to that applied in Wisconsin and other states, now before U.S. Supreme Court.

Also at issue is state's invasion of right to pregnancy interruption without compelling public necessity. Mississippi statute permits abortion by M.D. only when life of patient is endangered or when the pregnancy results from rape. MSMA seeks liberalization for medical reasons.

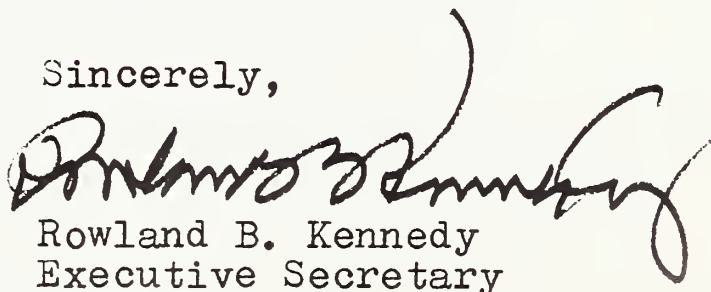
President Nixon's welfare reform plan took a shellacking at hands Senate Finance Committee, quashing proposal 14-to-1. Measure, called Family Assistance Plan and "Workfare," guarantees minimum income of \$1,600 annually and would increase welfare rolls to 24 million from present 10.4 million. In Mississippi, administration would up rolls to 806,000 from present 211,000, 282 per cent.

Professional liability insurance picture darkened with announcement that AMA program may have to be abandoned for want of a carrier. Negotiations with CNA Corp. are stalled by carrier reluctance to assume risks. Program, if and when implemented, would be of little benefit to Mississippi which has fourth lowest premium rate in U.S. seeks help for states with premium levels up to \$15,000 per year.

Part 1-A Medicare deductible and co-pay for hospitalization goes up again on Jan. 1, 1971, the third increase since 1966. Admission deductible will be \$60, up from present \$52, and co-pay from \$10 to 90th days will be \$15 per day. Lifetime reserve co-pay zooms to \$30 per day, while daily co-pay for extended care facility rises to \$7.50 for 21st through 100th days.

Local dues payments, under new service to members permitting check to do the job, will establish 1970 income tax deductions. System eases burden of billing and accounting from component medical societies and assures records accuracy. Because staff is doing work with no additional personnel, members are asked to respond now before legislature and annual session work take priority over billing service.

Sincerely,



Rowland B. Kennedy
Executive Secretary

Mr. Parish Will Head Blue Shield

Ned F. Parish, executive vice president of the National Association of Blue Shield Plans (NABSP), has been designated to become president of the National Association of Blue Shield Plans when John W. Castellucci retires next year.

In an announcement released from Chicago headquarters, Dr. Ira C. Layton, of Kansas City, chairman of the National Association of Blue Shield Plans, said:

"By designating Mr. Parish at this time as the one who will succeed Mr. Castellucci as president when he retires on Nov. 1, 1971, we will assure the Association of continuity in our top management."

Castellucci, who recommended the need for a plan of succession, said:

"We are facing many critical issues in health care financing. It is essential that we have a strong and consistent approach to meeting them, and Ned Parish will be able to provide the needed administrative leadership."

Parish, an outstanding administrator in the health care prepayment field for more than a

quarter century, has been executive vice president of the Association since 1967.

Castellucci has been chief executive officer of NABSP since 1955. At that time Blue Shield Plans covered 34 million persons.

Today, the 73 Blue Shield Plans in the U. S. and Puerto Rico serve 79 million persons under private and government programs.

Syntex Introduces Roll-top Applicator

Syntex Laboratories, Inc. has introduced a new concept in pharmaceutical packaging, a roll-top applicator, for its dermatologic product Synalar Solution 0.01 per cent (fluocinolone acetonide).

The new roll-top applicator will provide an easier method of applying the topical corticosteroid in layered therapy and diseases with widespread lesions. Dermatologists will find the applicator useful in both atopic and contact dermatitis.

Syntex Laboratories is the U. S. subsidiary of Syntex Corporation and is involved in the development, production and marketing of pharmaceutical and animal health products.

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Arizona Cardiac Symposium Scheduled

The Arizona Heart Association has scheduled its 14th Annual Cardiac Symposium for Jan. 22-24, 1971. The meeting will be held at the Arizona Biltmore Hotel in Phoenix.

Guest speakers include Drs. Roman DeSanctis, Joseph Perloff, Gilbert Blount, and Rene Fabalero.

For further information, write Arizona Heart Association, 1720 McDowell Road, Phoenix, Arizona 85006.

New Treatment For Resistant Gonorrhea

A treatment program that can cure a high percentage of even supposedly "resistant" strains of gonorrhea, is reported in a new scientific exhibit being shown at the annual meeting of the American Academy of General Practice in the Civic Auditorium.

The study, conducted by Dr. Morton Nelson, Assistant Health Officer in the Alameda County Health Department, Oakland, Calif., states that gonorrhea is now number one among reportable communicable diseases, with two million cases—approximately one per hundred persons—estimated for 1969.

Dr. Nelson's report notes, "Though gonorrhea is epidemic, there exists no systematic national program to attack the problem." And, "Treatment failures using previously proven schedules are being reported from around the country, describing *N. gonorrhea* 'resistant to penicillin.'"

The study presents experience with rapid-acting aqueous procaine penicillin (APP), used in treating strains of *N. gonorrhea* whose "resistance" has been attributed to undertreatment by (1) infected "hostesses" around military bases in Asian countries who self-treat with subcurative oral antibiotics, and (2) clinicians who employ sub-bactericidal dosage levels of penicillin.

Dr. Nelson's report concludes:

(1) "At increased dosages of fast-acting penicillin (APP) practically all strains—even the supposedly 'resistant' ones—are susceptible."

(2) "The cure rates 98 per cent (males)—100 per cent (females) with the 4.8 million unit dose of APP are unquestionably encouraging."

(3) "Nevertheless, the pattern of microbial resistance is constantly changing. It is imperative that a high enough dose be employed to keep those less susceptible strains from increasing or mutating to more virulent ones."

Mississippian Joins USP Staff

Kenneth N. Barker has been appointed to the staff of The United States Pharmacopeial Convention in the newly created position of Director of Administrative Research.

According to U.S.P.C. Executive Director, William M. Heller, Barker's long-range research will be in areas of drug utilization that relate to the U.S.P. responsibilities of selecting those drugs best established medically, providing pharmaceutical quality standards, and encouraging and educating health practitioners in using them. His immediate assignment will be in planning the new systems and facilities needed for the expanded activities of the U.S.P.C. organization, a national consortium of colleges and national and state organizations of medicine and pharmacy.

As Project Director of Drug Systems Research, a multidisciplinary research group organized first at the University of Arkansas and later at the University of Mississippi, Barker developed a methodology for measuring the incidence of medication errors in hospitals and conducted pioneer research in the use of automated patient records and unit-dose packages of drugs to improve hospital medication systems. His recent research has concentrated on the utilization of pharmacists' time and skills in small hospitals.

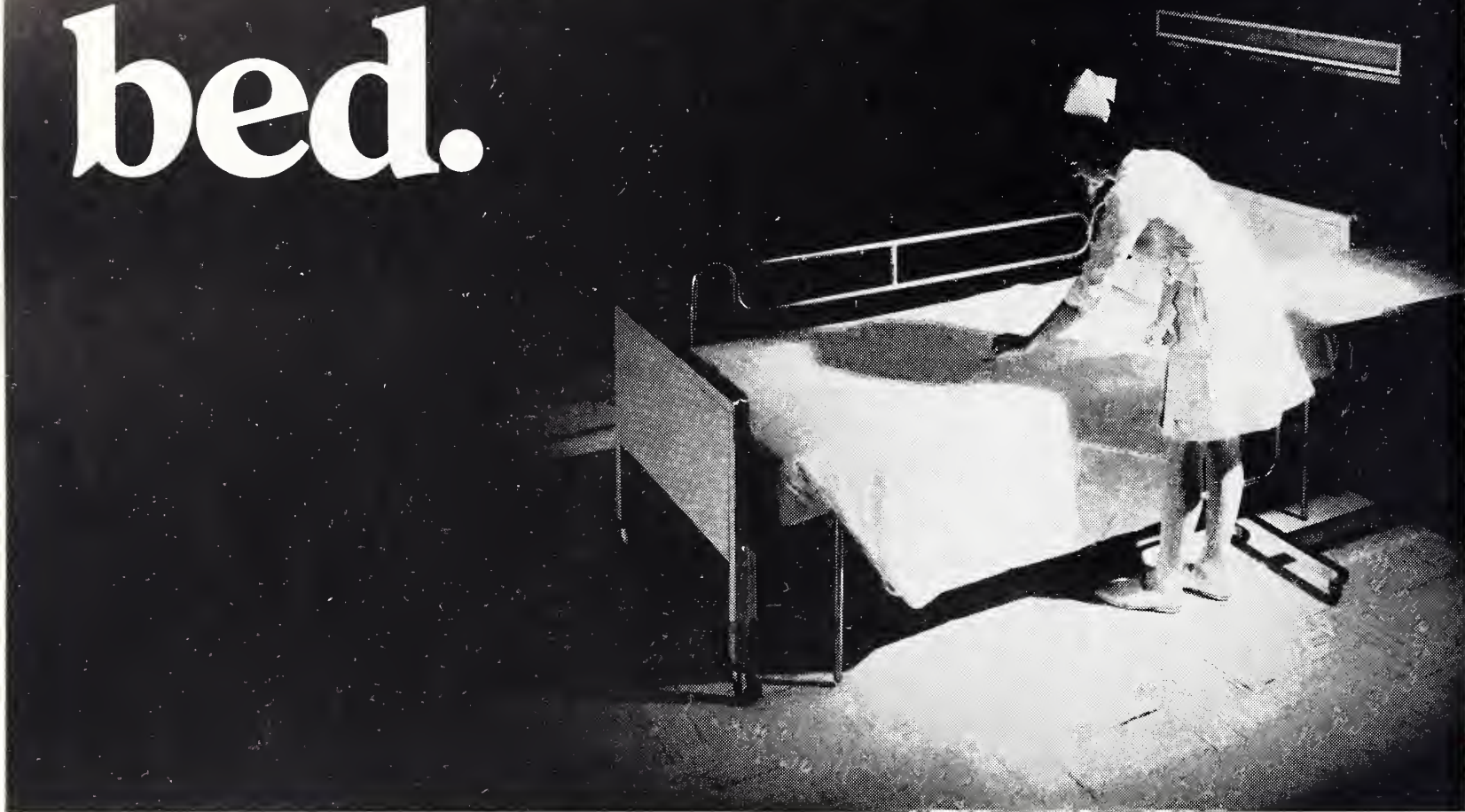
Mr. Barker received his B.S. and M.S. degrees in pharmacy from the University of Florida and expects to receive his Ph.D. degree in pharmacy administration from the University of Mississippi in 1971. He has worked as a community and hospital pharmacist and taught hospital pharmacy at the University of Mississippi.

His consultant activities have included such companies as Wm. S. Merrell, I.B.M., Brewer Pharmacal Engineering, Sherwood Medical Industries, and several university and non-university hospitals. He is Consultant on Hospital Pharmacy Facilities Design to the University of Mississippi School of Pharmacy and is currently involved as the editor of the forthcoming U.S.P.H.S. manual on planning hospital pharmacy facilities.

In addition to articles in hospital, pharmacy, and nursing journals, Mr. Barker has co-authored several books and reports.

Mr. Barker is a member of the American Pharmaceutical Association, the American Society of Hospital Pharmacists, and the Rho Chi Society.

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DATELINE

**Students Get
ive Membership** Chicago - Medical students in four states have full active, voting membership in medical associations. Colorado and Kansas have chartered student societies, while Indiana and Pennsylvania have opened membership to future physicians. In Mississippi, a committee the Board of Trustees is working with UMC faculty and student leaders to set up voting membership for juniors and seniors who will have their own component, the University Medical Society.

**Opposes Report
Payments to IRS** Washington - AMA has filed objections to the IRS' proposal which would require insurance carriers and Medicare to report "unassigned payments" to care providers. About 13 million Americans have multiple coverage, AMA said, and often collect more than charged their physicians. Result of reports would be a distortion of income, making it appear that doctor had received entire amount of benefit payments when, in fact, he had not.

**tal Health
gram Progresses** Jackson - A \$7 million investment will give the state seven mental health centers serving 34 counties, according to the Interagency Commission on Mental Illness and Retardation. Centers are open and operational at Oxford, Tupelo, and Gulfport with Clarksdale slated open soon. Another three centers are under construction at Greenville, Jackson, and Meridian. Program was authorized by 1968 legislature. Federal funds in project amount to \$4 million.

**Slams Teddy's
Proposal** Washington - Lame duck liberal Sen. Ralph Yarborough (D.,Tex.) held bobtailed hearing on Sen. Edward Kennedy's (D.,Mass.) national health insurance bill, but Nixon administration bashed it as "inconceivable." Costs of program would be \$77 billion per year, but this didn't stop supporters Mike DeBakey, Rashi Fein, Isadore Falk, and George Meany. Administration blast was delivered by HEW Undersecretary Veneman. Mr Meany called AMA Mediscredit "legislative quackery."

**abama Initiates
istant Training** Birmingham - The University of Alabama Medical Center has its first class seeking baccalaureate degrees as physicians' assistants. Students will be trained to take histories, do physical exams, handle casts and superficial wounds, and perform diagnostic studies, relieving M.D.s of many time-consuming tasks. Program is patterned after that at the University for family practice. Pioneer program at University of Colorado emphasizes pediatrics.

Gone with the wind



MSBH Studies Waste Disposal

A State Board of Health survey shows 44 municipalities have no solid-waste collection service and 29 have no designated site for disposal of such waste.

The survey is part of a three-year study of what local communities need in order to control the growing volume of bottles, cans and other refuse.

The survey is being made by personnel of the Division of Sanitary Engineering, State Board of Health, headed by Joe D. Brown, with V. T. Hawkins of the division, designated by Brown to direct the survey. Some 100 sanitarians at the local level are participating in the survey, which thus far has covered 262 municipalities and 132 unincorporated communities in 80 counties.

Figures compiled through August show 193 municipalities with some form of public collection and 23 with private collection, with two having both, leaving 44 municipalities with no collection service for solid waste.

The figures also show 233 municipalities with designated sites for the disposal of solid waste—and 29 municipalities without such designated sites.

Of the 132 unincorporated communities, five

have some form of public collection and 16 have private collection, but the other 111 do not have solid-waste collection services.

The survey shows 67 of the unincorporated communities with designated sites for the disposal of solid waste, but the other 65 do not have sites designated for this purpose.

Hawkins estimates 1,925,558 tons of refuse per year statewide, making an average of .89 tons per capita annually, using an estimated state population of 2,161,680.

Brown and Hawkins discussed the data recently with Elmer G. Cleveland, regional representative, in Atlanta, of the Bureau of Solid Waste Management, U. S. Public Health Service, H.E.W.

Cleveland praised the State Board of Health for being well ahead of schedule in its study, scheduled to run from March 1, 1969, to March 1, 1972. In 1965, Congress passed a Solid Waste Disposal Act providing grants to the states for studies, and Gov. John Bell Williams designated the State Board of Health to make the study. The agency is matching, on a 50-50 basis, a \$31,000 U. S. Public Health Service grant.

"Solid waste programs, for example," said Cleveland, "fight all forms of pollution, because solid waste emptied into water pollutes the water, and solid waste burned in the open air pollutes the air."

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ORIGINAL PAPERS

Amputations in Patients With Peripheral Vascular Disease

RICHARD WARREN, M.D.

Cambridge, Massachusetts

AMPUTATION IN THE lower extremity is perhaps the oldest operation known to surgeons, but the majority of patients undergoing it (who in civilian life are largely older individuals with gangrene) are not reaping the benefits of modern advances in technique and rehabilitation. The reasons for this are twofold.

First, although modern anesthesia, supportive care, and antibiotic treatment have made thoughtful and meticulous operations possible, many of the tenets still being applied to the management of these patients stem from a period years ago when the amputations were done to save lives, the patient's potential for rehabilitation to walking being a secondary consideration.

Secondly, although modern concepts of rehabilitation can be applied to the majority of these patients, old time principles which make for delayed and discontinuous rehabilitation are still practised in many centers. Eighty-five per cent of the amputations for ischemia done in 166 Veterans Administrations Hospitals were performed

by general surgeons with no competence or interest in the techniques of postoperative ambulation.¹ This phenomenon is widespread throughout the country and is one of the major drawbacks of progress in the field.

The author discusses levels for amputation in patients with peripheral vascular disease, indications for surgery, preparation, techniques and rehabilitation. Special emphasis is given to various methods of rehabilitation and the importance of assisting the patient to walk again if possible. Some time-worn misconceptions are pointed out and precautions against them are listed.

The mortality among patients receiving amputations for arteriosclerosis is about 25 per cent at the two year period and 50 per cent at five years.² The importance of treating the patient with dispatch so that he may enjoy his later years is not sufficiently realized.

Since the advent of arterial reconstruction techniques almost 20 years ago, many legs have been saved from amputation which otherwise would

Presented before the Section on Surgery, 102nd Annual Session, May 12, 1970, at Biloxi.

From the Department of Surgery, Harvard Medical School and the Surgical Departments of the Cambridge Hospital and the Veterans Administration Hospital, West Roxbury, Massachusetts.

have been lost. The increasing age of the population has, however, kept hospitals amply supplied with individuals in whom arterial reconstruction is not possible and therefore must receive amputation.

Emphasis on certain aspects of surgical technique not widely accepted or recognized is particularly important in patients with impaired circulation. A partial list follows: (1) simple preparation of the skin, (2) flaps cut so as to preserve circulation, (3) gentle technique, single incisions, (4) nerves divided without treatment, (5) primary closure with minimum number of sutures and no drain, and (6) the part to be placed at rest postoperatively.

The above principles put the least burden possible on the healing wound. A wound that is left open must heal by secondary intention. It must create infected granulations, thus requiring more blood supply than the healing of a primarily closed wound. Preparation of the skin is done with soap and water or pHisoHex, no antiseptics being applied. Attempts to wall off the lesion for which the amputation is being done are usually ineffective and are not recommended. This is undertaken after the skin is prepared. The remainder of the items on the list are self-evident.

AMPUTATION LEVELS

The levels of election for amputations in ischemia are:

(1) transphalangeal, (2) transmetatarsal, (3) Syme, (4) below knee, (5) through knee, or (6) above knee.

Other levels in the foot, such as through the tarsus, are unwise choices because of the thin ischemic skin that lies directly over the bone in such amputations. Since the Syme and the through-knee levels are used only rarely and only by specially interested groups, only four sites of election are commonly considered. Hip joint disarticulation, or even higher amputation has not been listed, because it is rare indeed that a patient having the indications for operation at that level presents a favorable prognosis for life.

Selection of one of the four areas is made on the basis of the appearance of the skin at the site of the proposed amputation. If it is not involved actively in infection or in gangrene and is not edematous, amputation should be undertaken at the most distal level on the list regardless of the state of the pulsations or of signs of collateral circulation.

When the lowest pulse is at the femoral area or higher and evidence for collateral circulation

is poor, the prognosis for healing at the point of selection is, of course, less good than when lower pulsations are felt, but that does not mean that the level of election should be raised for this reason. Likewise if there is very poor bleeding during the operative procedure so that few, if any, arteries need ligature, the prognosis for wound healing is not so good as in the vigorously bleeding one, but the level should not be raised because of this fact. Many wounds have healed in the absence of pulses in the area and of bleeding in the wound requiring ligature.

It is clinical common sense, however, that if a patient has no potential for walking and a very ischemic limb, a more proximal amputation will be selected than in a person with good potential for rehabilitation.

INEVITABLE AMPUTATION

The chief factor that makes amputation inevitable is necrosis involving deep structures (bone, tendon, joint, or joint capsule). Certain patients with dry gangrene who are non-ambulatory and senile may be permitted to undergo auto-amputation over a period of months. Otherwise, surgical amputation is indicated.

There are four principles in the preparation for amputation here:

(1) bed rest, (2) local drainage, (3) antibiotics, and (4) patience.

In many patients the level at which the amputation will be done, once it is decided upon, is clear. In others the level will not be decided until the period of preparation is over. If the lesion is dry but infection seems to be spreading upward from it, elevation of the corner of the eschar to see if some drainage can be procured is helpful. This should not be done to any major extent, and not enough to cause bleeding.

If infection has been present, it often takes as long as 10 days before a decision in favor of a transmetatarsal amputation, for example, for a lesion of a toe, can be made.

The techniques of the various amputations are detailed by Warren and Record.² It is important to follow them. Some of the more important have been mentioned. One other should be emphasized. I refer to the incision for the below knee amputation which consists of a long posterior and an "absent" anterior flap. This arrangement makes for the best circulation to the stump since the dorsal flap is always the more ischemic.

REHABILITATION

1. Amputations in the foot. The following principles apply:

(a) bed rest for 7-10 days, (b) first dressing

at five days, (c) protect the heel and bony prominences of both the amputated and the opposite side, (d) overhead trapeze, (e) no cradle over the foot, (f) first dependency on a trial basis, (g) leave sutures in 14 days, and (h) full weight bearing at between two and one-half and three weeks.

The only exception to changing the dressing first on the fifth day is if there is excessive pain or fever before then, or if the wound hematoma does not drain through and stain the dressing. In the latter case it may mean that it is pocketed under the flaps which then must be inspected. If the hematoma has not drained then it should be evacuated. The trapeze is to allow the patient to move around in bed without scuffing the opposite foot. The banning of a cradle is to prevent the patient inadvertently striking the wound against its rigid frame.

Making the first dependency a trial means having the patient sit on the edge of the bed with the foot dependent, the dressing having been removed. One then observes how long it takes before the wound area becomes suffused and cyanotic. Periods of dependency to stay within that limit are arranged during the next day or two. The wound will rapidly become tolerant to longer periods over the next four or five days.

2. Amputations above the foot. In patients who are candidates for rehabilitation the immediate postoperative plaster technique is used as follows:

(a) The plaster is applied on the operating table and changed weekly.

(b) During the first week the patient stands but with no weight bearing.

(c) During the second week weight bearing is started and becomes progressive (provided the wound is normal to inspection).

(d) During the third week full weight bearing is instituted. The sutures are removed during this week.

(e) At the beginning of the fourth week the "going home" prosthesis is provided and the patient is discharged before the end of it.

The advantages of this technique have now been well established as follows:

- (1) Short hospital stay.
- (2) Excellent patient morale.
- (3) Return to prior (?home) environment facilitated.

(4) Continuity of medical responsibility in that the doctor doing the surgery supervises the rehabilitation.

(5) If the patient is a doubtful candidate for eventual walking an early decision can be made

on the extent to which efforts and money should be expended to accomplish it.

Clinics reporting results of the Immediate Post-operative Plaster technique have nearly always applied it to selected cases and primarily to below-knee levels. Under these circumstances rehabilitation and healing success has been procured in 80 to 90 per cent of patients.

It must be made clear that the technique is entirely harmless, provided the plaster is properly applied and weight bearing is not undertaken too early. Furthermore, the advantages to be derived in patients who are candidates for rehabilitation are overpowering, as listed above.

CAMBRIDGE RESULTS

The results of the technique at the Cambridge Hospital, for example, over a period of two years were as follows:

		Deaths
Uninterrupted rehabilitation success	9	
Rehabilitation success after delay	1	
Healing success, rehabilitation failure	2	1
Healing failure	7	3
	—	—
	19	4

In the above table, uninterrupted rehabilitation success means that the patient was going home walking with a prosthesis within four weeks. Rehabilitation success after delay means that the patient healed successfully and walked but not within the first four weeks. Healing success, rehabilitation failure means that the patient healed properly but did not turn out to be a candidate for rehabilitation after trial with walking.

HEALING FAILURE

It is to be emphasized that this is a city hospital in which patients are old and frail and that our enthusiasm for the technique and exploring its potentials made us apply it to nearly all comers. The seven causes of healing failure (which included three of the four deaths) are listed as follows:

Hemorrhagic purpura	(BK)
Thin skin over bone end	(AK)
Postoperative seizure and injury to the stump ..	(BK)
Extension of sepsis from lower leg	(AK)
Fell out of bed on cast	(BK)
Advanced ischemia	(BK)
Technical fault in operative technique	(BK)

In the four survivors, the stumps were either reamputated or the patient was sent out with an open unhealed wound. In none of them could we say that the technique was responsible for the healing failure, an event that is only too familiar

in this type of patient by the older techniques.

No discussion of amputations for ischemia would be complete without mentioning diabetic neuropathy and gangrene even though the patients at operation have good circulation and may have even better than normal pulses in their feet.

The familiar picture is one in which severe infection has invaded the foot of a diabetic with neuropathy via a soft corn or a fungus infection. Because of the lack of pain sensation it is neglected by the patient who finally appears with a draining sinus in a swollen red foot and some necrosis of one of the toes. The pulses are easily palpable and the foot is surprisingly insensitive.

The principles of management are the reverse from those with good circulation except that any deep structure involved with the infection must be removed, hence the term "drainage amputation." Here primary closure cannot be done, incisions must be wide and extend far more proximal than the infection so that dependent drainage will be possible. The wounds are packed open. The incisions for these amputations are demonstrated in Warren and Record.²

The patient who was walking before he developed the lesion that caused the loss of his foot should be able to walk again. Emphasis preoperatively, intraoperatively, and postoperatively must be on future ambulation and this should be understood by the patient from the beginning so that optimism will prevail.

VARIED RESULTS

Different hospitals report varied results in terms of rehabilitation, because their clienteles are different. A city or a county hospital has a high percentage of patients who come from nursing homes and homes for the aged who have no potential for walking and many associated diseases. A private practice which caters to the well-to-do will be at the other end of the spectrum, whereas in between will lie the community hospital and the veterans hospital groups.

In order to realize the potential of whatever group one is dealing with, one must follow prin-

ciples similar to those outlined in this paper but must also resolve to suppress certain misconceptions which have been passed down through generations of surgeons and are unfortunately widespread. Here is a list of precautions against them:

1. Avoid precautionary preamputation sympathectomy; it does not assist healing.
2. Eliminate the term "mid-thigh"; leave a long lever arm in an AK amputation.
3. Do not succumb to the temptation of a "provisional" BK incision with the idea of going higher if bleeding is poor.
4. Eliminate "It is only an amputation—a good case for the junior resident"; the patients may be operated on by the junior residents, of course, but only with the help of a Visit who is educated in these matters.
5. Forget the old concept "the circulation is so poor that the wound must be left open"; the more granulation tissue, the more circulation is required to heal it.
6. The presence or absence of diabetes does not by itself affect the selection of level.

SUMMARY

The principles, detailed technique, preoperative and postoperative care, indications, and selection of level for patients with ischemic limbs undergoing amputation are presented. In patients who may be candidates for walking, the most distal level of election where the skin is normal should be selected, regardless of the state of the peripheral circulation.

An experience with the immediate postoperative prosthetic fitting technique showed that of 19 patients 10 were uninterrupted rehabilitation successes in a city hospital type of practice. The technique is highly recommended.

A warning is sounded against certain time-worn adages relating to amputations for ischemia in the lower extremity. ★★★

REFERENCES

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Surgical Emergencies of the Newborn

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SURGICAL EMERGENCIES OF the newborn infant are of multiple etiology. Generally such infants will present with respiratory distress, abdominal distention and vomiting, obstructive uropathy, tumors of embryonic origin, or with abnormalities of the central nervous system. In addition, there are a number of infants with miscellaneous surgical problems such as omphaloceles, fractures and other manifestations of birth trauma, cutaneous defects, etc. This presentation will deal with the principal surgical pathological conditions leading to emergent respiratory and abdominal distress. Anomalies of less urgent or elective nature have been omitted.

Although those conditions leading to respiratory distress are generally more urgent than those causing abdominal problems, many of the abdominal conditions nevertheless require prompt attention if the infant is to survive. Little consolation may be gained from the adequate handling of a respiratory emergency at two hours of age only to have the child succumb to an unsuspected abdominal abnormality a week later. The management of any particular problem therefore becomes one of priority. Prompt recognition and treatment will usually lead to an improved outcome.

Respiratory distress in the newborn infant may be quite sudden in onset or may present from the time of birth. Acute respiratory distress demands aspiration of the pharynx and the establishment of an airway, with or without an endotracheal tube. The nares and the esophagus should be checked for patency and a chest film

obtained. Several surgical diagnoses should be considered.

Surgical emergencies of the newborn infant are of multiple etiology and may involve nearly all organs and areas of the body. The author describes the principal anomalies and abnormalities which may lead to acute respiratory and abdominal distress. He gives special attention to atresia, atelectasis, diaphragmatic hernias, obstruction, and gastrointestinal perforations.

As the newborn infant is an obligatory nasal breather, obstruction of the nasal passages may rapidly lead to asphyxiation. Choanal atresia is a congenital malformation of the posterior nares in which there is either a membranous or bony block between the nasal cavity and the nasopharynx. The diagnosis may be rapidly established by passing a small plastic catheter, usually 8 Fr. in size, through each side of the nose into the pharynx. If an obstruction is encountered, choanal atresia is likely and may be either unilateral or bilateral. When one-sided, obstruction and respiratory difficulty may occur if the single patent side becomes plugged with mucus or if a catheter is inserted. An oral airway is used as an immediate but temporary measure. Surgical correction consists of relieving the obstruction and the use of tubular splints for a period of several weeks until the airway is well established and epithelialized.

Although esophageal atresia represents an ab-

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normality of the alimentary canal, it clinically presents as a problem in respiratory distress. The most common (86 per cent) malformation is that of a blind upper esophageal pouch with a tracheoesophageal fistula between the lower pouch and the trachea usually at the level of the carina.¹ Respiratory distress occurs when swallowed saliva fills the blind upper pouch and overflows into the pharynx causing airway obstruction and aspiration.

Of equal or greater importance is the fact that gastric juice may regurgitate via the lower segment fistula directly into the lungs. Although sudden regurgitation of mucus from the upper pouch may cause acute cyanotic episodes, it is the repeated soiling of the lungs with gastric acidic fluid which may cause the most amount of difficulty in terms of pneumonitis. This is illustrated by the example that infants with pure esophageal atresia without fistula may have less difficulty with pneumonitis than those patients in whom a distal fistula is present.

ESOPHAGEAL ATRESIA

Esophageal atresia should be suspected in any infant with excessive salivation. It should further be recognized that the mothers of infants with high intestinal obstruction, either at the level of the esophagus or duodenum, may have hydramnios because the fetus cannot swallow or absorb normal amounts of amniotic fluid. Thus, it becomes axiomatic that any child born of a mother with hydramnios of unexplained origin is a candidate for investigation of esophageal patency. This may be easily accomplished by the passage of a nasogastric tube. However, care must be taken to avoid the situation where a small flexible plastic catheter may turn or curl in a blind esophageal pouch giving the examiner a false sense of security as to the length of the esophagus.

When esophageal atresia is suspected, it is far safer to pass a No. 12 or 14 Fr. catheter through the mouth. A tube this size and stiffness will not curl in the pouch and will meet an obstruction at about 12 cm from the upper alveolar ridge if esophageal atresia is present. Although the distance from the alveolar ridge to the end of the pouch will vary somewhat from infant to infant depending on size, birth weight, and the level of atresia, this measurement is surprisingly constant with a variance of only one or two cm either way.

A blind upper esophageal pouch filled with air is often visible on A-P and lateral chest x-rays, while the presence or absence of gas in the stom-

ach on the same films will give an indication of the presence or absence of a distal pouch tracheoesophageal fistula. In fact, infants with tracheoesophageal fistulae often have increased amounts of gas in the abdominal viscera as air is forced through the fistula during expiration, particularly when the baby cries.

RADIOLOGIC DIAGNOSIS

The diagnosis of esophageal atresia may be confirmed radiologically after a controlled amount of water soluble x-ray contrast material has been placed in the blind upper pouch. During this procedure, care must be taken to deliver a precise amount of dye (not over 1 cc) into the pouch to prevent overflow aspiration. This is accomplished by first aspirating the upper pouch of all mucus and then inserting a contrast filled catheter into the pouch with syringe attached. One-half to one cc of 30 per cent contrast material is then instilled into the pouch, a lateral upright film is taken, the dye aspirated, and the catheter removed. While the use of contrast material may not be necessary to establish a diagnosis which has already been clinically confirmed by the use of a catheter, it will help to rule out those rare cases where there is also an upper pouch tracheoesophageal fistula.

Management of the child with esophageal atresia and tracheoesophageal fistula should include an early gastrostomy under local anesthesia. The gastrostomy tube is placed to suction to minimize the possibility of regurgitation of gastric juice into the airway. Immediate and continuous attention must also be paid to keep the upper airway free of mucus and to treat any pneumonitis or atelectasis which may already be present.

SUCTION MANAGEMENT

Management of the upper pouch consists of oropharyngeal suctioning through the mouth at 15 minute intervals. Aspiration in this fashion insures that the blind upper esophageal pouch will be kept empty of saliva. The use of an indwelling catheter in the upper pouch placed to constant suction may be helpful but may lead to complacency and should not replace constant observation and intermittent aspiration by the nursing staff.

The definitive therapy of esophageal atresia is that of a thoracotomy with division of the fistula and establishment of esophageal continuity by anastomosis. This procedure should be attempted only when conditions as related to the respiratory status are optimal.

Post-operatively, the gastrostomy is used for

feeding until esophageal continuity is assured by an esophagogram on the fifth or sixth day. Thereafter, the tube may be sealed but left in place until a repeated barium swallow at four to six weeks shows no evidence of esophageal stricture. If stenosis at the suture line has developed, a string may be passed and the gastrostomy used for retrograde dilatations.

Much more infrequently (3-4 per cent), infants may present with an H-type tracheoesophageal fistula without atresia. These lesions are often difficult to diagnose as the fistula may be of small caliber and only infrequently passes material from the esophagus into the trachea. Any child with repeated coughing or respiratory distress associated with feedings should be suspect. The diagnosis is best established with cinefluorographic studies. Frame by frame analysis of the movie film is essential, and repeated studies are often necessary. Unlike the common type of esophageal atresia, where the tracheoesophageal fistula is usually at or near the carina, H-type fistulae may occur anywhere along the posterior wall of the trachea and are often at the cervical level.

PNEUMOTHORAX

Pneumothorax is not an infrequent complication of infants with respiratory distress, with or without vigorous attempts at resuscitation, and may occur in otherwise asymptomatic infants. It may be secondary to the "air block" phenomenon. In this situation, blockage of an air passage may produce markedly altered pressure relationships within the chest with subsequent rupture of alveoli and dissection of air subpleurally along the bronchi. Air may then dissect either into the mediastinum producing pneumomediastinum or may break into the pleural space producing pneumothorax. As air in the pleural space increases, it in itself becomes a source of increasing respiratory distress.

A small amount of unilateral pneumothorax in a child without respiratory distress may on occasion be observed and will subside spontaneously. In other instances, it may be wise to aspirate the air or to place a thoracotomy catheter to waterseal drainage and suction particularly if there is an increasing amount of air with mediastinal shift, herniation of the pleura to the opposite hemithorax, or bilateral pneumothorax. When there is doubt regarding the amount or significance of pneumothorax, or as to the availability of adequate nursing personnel, it is by far wiser to place a thoracotomy tube.

Occasionally, total or partial collapse of an entire lung may result from the aspiration of amni-

otic fluid or from other secretions. Such an infant presents with respiratory distress, and opacification of the lung by x-ray. Vigorous efforts are indicated to inflate the lung before consolidation and infection ensue. This may be simply done by passing a small smooth-tipped catheter into the trachea under direct laryngoscopy. Aspiration of the secretions may immediately correct the problem.

ALTERNATE METHOD

An alternate method is to insert an endotracheal tube through which the infant may alternately be suctioned and supplied with oxygen. This latter method enables the physician to aspirate repeatedly without additional trauma to the larynx. An atmosphere of high humidity and mist, along with postural drainage and pulmonary physiotherapy, is essential if recurrence of the collapse is to be avoided. All aspirated secretions should be preserved for culture and antibiotic sensitivities.

Diaphragmatic hernias causing acute symptomatology in infancy are largely of the posterolateral, foramen of Bochdalek, type. This foramen represents a persistence of the embryonic pleuroperitoneal canal. The great majority of these hernias occur on the left side where there is no buttressing by the liver and where persistence of the foramen allows the abdominal contents to reside in the left pleural cavity. Usually these hernias have no true sac. Depending on the amount of abdominal viscera in the chest and the amount of air swallowed, respiratory distress may be present soon after birth or may develop during the first few days or even weeks of life.

DIAGNOSTIC PROBLEMS

An occasional child or adult with limited herniation may be entirely asymptomatic. The diagnosis of diaphragmatic hernia cannot be made accurately without a chest film since breath sounds from the right side of the chest are easily transmitted and heard on the left side. Similarly, bowel sounds may be transmitted from the abdomen in a normal infant. Dullness and decreased breath sounds in the left side of the chest, accompanied by a mediastinal and cardiac shift to the right side, are presumptive evidence for the diagnosis of diaphragmatic hernia. An emergency chest film is then indicated.

Once the diagnosis of diaphragmatic hernia has been established, operative intervention should follow without delay. While awaiting surgery, a nasogastric tube should be inserted and placed on suction hopefully to prevent further

distention of the stomach and viscera residing within the chest. If respiratory distress is marked, an endotracheal tube with positive pressure assistance of respiration is indicated. Positive pressure with a face mask should be avoided as air may be forced down the esophagus, further compromising respiratory status.

The operative procedure should be accomplished through an upper abdominal subcostal or transverse incision which gives immediate access to the diaphragm. A thoracic incision should be avoided since the surgical problem is usually not one of closure of the hernia defect but rather one of accommodating the viscera in the unused abdominal cavity. It is far more difficult to attempt to stuff the intestine into the abdomen from above the diaphragm than it is to deliver the intestine on to the operating field from below the diaphragm, to complete the hernia repair, and then to replace the intestine into the abdomen closing only skin if it is found that a fascial closure will compromise respiration.

In most instances, however, it is possible, after manual stretching of the abdominal wall, to reduce the entire bowel into the peritoneal cavity and to accomplish muscle, fascial, and skin closures. In addition, the intestinal tract should be inspected for other congenital anomalies, particularly those of abdominal adhesions and bands associated with malrotation which is almost invariably present.

CLOSING THE DEFECT

Usually the diaphragmatic defect is closed without an indwelling thoracotomy catheter. Instead, the mediastinum is shifted to the midline by negative pressure produced with a rubber bulb syringe and rubber catheter which is removed from the chest as the last diaphragmatic suture is tightened. The anesthesiologist may assist during this portion of the procedure by advising when the cardiac impulse has shifted from the right side to the midline or slightly to the left. No attempt should be made to forcibly inflate the unexpanded lung since this often results in a rupture of pulmonary tissue and a continued air leak. Usually, left alone, the uninflated lung will expand slowly over the course of the first few post-operative days as the pneumothorax is absorbed. On occasion, true agenesis of the lung may be encountered.

Upper airway obstruction may result from a number of deformities about the mouth, palate, neck and pharynx as well as from congenital cervical tumors including goiter. These deformities

often predispose to incoordination of the swallowing mechanism with resultant aspiration and cyanotic episodes, especially at the time of feeding. Treatment in many infants may consist of nasogastric tube feedings or of the use of a gastrotomy.

Of particular interest are those infants with micrognathia and glossoptosis (Pierre-Robin Syndrome). Failure to control the tongue in such patients may result in sudden asphyxiation. These infants require intensive nursing care. A silk suture may be placed through the tip of the tongue as a temporary measure to keep the tongue forward or to be used for traction during a cyanotic episode.

LOBAR EMPHYSEMA

Lobar emphysema may cause acute respiratory distress in infancy and is manifested by a mediastinal shift and a hyperlucent area in the lung fields on chest x-ray. The x-ray may appear so hyperlucent as to be confused with pneumothorax, but scattered lung markings are usually visible and serve to establish the correct diagnosis. The emphysema usually involves a single upper lobe. Treatment consists of lobectomy.

Although ascites is a rare entity in the newborn infant, it does on occasion present a severe problem with abdominal distention and secondary respiratory distress. This is especially true in those infants born with ascites in whom the diaphragms are extremely high and in whom the neonatal respiratory state is severely compromised from the outset. Although of multiple causes, neonatal ascites should be treated by paracentesis at the first sign of respiratory distress. It is by far better to tap an abdomen not knowing what is there than to risk further respiratory deterioration. When respiratory distress is not a problem, abdominal x-rays and intravenous urograms may be obtained prior to paracentesis.

ABDOMINAL EMERGENCIES

The classical presentation of a newborn infant with an intestinal abnormality is that of bile-stained vomiting, distention, and failure to pass normal meconium. It should be noted, however, that a distended abdomen generally implies the patency of a sufficient number of intestinal loops which may enlarge as air is swallowed. It is therefore apparent that children with high intestinal obstruction, either of the duodenum or proximal jejunum, may have maximally distended intestine without overall distention of the abdomen. If there is any suspicion of an intraabdominal problem, feedings should be discontinued at once and x-rays of the abdomen obtained.

It is our custom to request A-P, supine and up-

right, and lateral films of the abdomen. The lateral film is often helpful in detecting the presence of colonic gas, especially in the area of the rectum. These plain abdominal films, which use air for contrast, will provide most surgical diagnoses. However, there will always be some infants where the diagnosis will be less obvious and where the differential lies between that of a paralytic ileus, perhaps associated with sepsis, and that of a low intestinal obstruction such as Hirschsprung's disease. In these infants, it may be necessary to proceed with a barium enema. The barium enema is particularly helpful in the diagnosis of malrotation, Hirschsprung's disease, and the meconium plug syndrome. In the latter instance, it may also be curative since the enema itself will wash out the plug. It should also be noted that the diagnosis of Hirschsprung's disease by barium enema in the newborn infant may be difficult as the change in caliber from a distally contracted to a proximally dilated bowel may not be apparent at this age.

When a surgical condition has been diagnosed, the infant should be placed on nasogastric suction, and hydrated with intravenous fluids. However, most newborn infants, unless they have been neglected for some time and have had considerable vomiting, will be in normal electrolyte balance. Intraoperatively, temperature regulation with a heating mattress and a continuously recording rectal thermometer should be provided. In the small premature infant, many abdominal operations may be completed under local anesthesia. Regardless of whether a local or general anesthetic is used, the anesthesia team should be present to continuously monitor the patient.

ATRESIA

Atresia is the most common cause for intestinal obstruction in the newborn (imperforate anus excepted). Most commonly occurring in the ileum or duodenum, atresias are less often encountered in the jejunum and rarely in the colon. The diagnosis is readily suspected from the plain abdominal x-rays and in the case of duodenal obstruction, the infant presents with a classical double-bubble appearance. The two bubbles represent stomach and dilated duodenum. In almost all cases of duodenal obstruction, the level of obstruction is distal to the common bile duct and the infant therefore vomits bile stained fluid.

Although it is impossible on the basis of x-ray to accurately predict the cause of duodenal obstruction, it makes little difference from the surgical point of view. Since patients with annular pancreas also have an underlying duodenal atresia or stenosis, the operation for congenital duodenal

obstruction consists of the shortest possible bypass. In most infants, this may be accomplished with a duodenoduodenostomy, although occasionally a duodenojejunostomy may be necessary. A gastrojejunostomy should be avoided.

When atresia occurs more distally in the bowel, the level of obstruction may be surmised from the number of small intestinal loops visible on the abdominal films. Usually the most distal loop just proximal to the point of atresia will be markedly dilated. At operation, atresia of the distal bowel should be handled by adequate resection of the blind, dilated, atonic, proximal loop and by an end-to-end anastomosis to the distal bowel. The surgeon must be certain that the distal bowel has internal continuity for its entire length. Patency is insured by injection of saline through a small needle into the lumen of the distal intestine and by watching the saline proceed all the way to the sigmoid colon.

ANASTOMOSIS

Although it may be technically more difficult, an end-to-end anastomosis is preferred and should be accomplished with a single layer of interrupted 5-0 atraumatic silk sutures. Care should be taken not to turn in a large cuff since this easily obstructs the anastomosis. Internal splints or catheters are not used, and every effort is made to be sure that the anastomosis is not angled or doubled upon itself as the bowel is replaced into the abdomen. A side-to-side by-pass anastomosis should be avoided because it may leave a blind intestinal loop.

Malrotation of the intestine, in itself a benign anomaly, is associated with other abnormalities which may produce acute symptomatology in newborn infants. Of particular importance are extrinsic duodenal bands, and lack of mid-gut fixation. While duodenal bands may produce a partial or complete obstruction of the bowel at that level, an unfixed mid-gut may undergo volvulus as it hangs suspended on the axis of the superior mesenteric artery.

INTESTINAL INFARCTION

Unless corrected, infarction of the intestine from the ligament of Treitz to the transverse colon may rapidly ensue. If this catastrophe is to be avoided, surgical intervention should follow quickly upon the diagnosis of acute intestinal obstruction especially where there is distention of the entire small bowel. Although a barium enema will usually suggest the correct diagnosis by virtue of confirming the presence of a malrotation, it is not a mandatory study and should never delay operation.

At laparotomy, the mid-gut volvulus, which is

usually in a clockwise direction, should be reduced, following which the surgeon must make a systematic search to rule out other congenital anomalies and to look for abnormal duodenal bands and other adhesions. All abnormal adhesions and attachments should be lysed. Meanwhile the bowel involved in the volvulus may be observed for areas of questionable viability. Finally, it is necessary to check the internal continuity of the duodenum because of the known association of intrinsic stenoses and webs with extrinsic adhesions and bands. This is most conveniently accomplished by passing a duodenal catheter through a small gastrotomy.

Approximately 10 per cent of infants born with cystic fibrosis will have a meconium problem in the neonatal period. Within this group of patients, there will be a wide spectrum of disease from those infants presenting with mild colonic obstruction due to sticky meconium and to those infants with the full-blown picture of inspissated meconium in the ileum or jejunum, with or without secondary volvulus and atresia.

MECONIUM ILEUS

A number of the patients will have perforations and meconium peritonitis as may be diagnosed radiologically by intraabdominal calcification. The infants with meconium ileus presents with a distended abdomen, with or without palpable meconium-filled loops, and an x-ray pattern suggestive of distal small bowel obstruction. Meconium ileus has the distinction of being the only form of intestinal obstruction where fluid levels are not usually visible on the upright abdominal film, simply because the meconium is too viscous to layer out.

Recent investigations have shown that a number of children with meconium ileus may be treated with hypertonic enemas using x-ray contrast materials. The technique involves the reflux of contrast material through the colon and into the small bowel under fluoroscopic control. The contrast material should enter the dilated loops above the area of obstruction where its hypertonic nature produces an influx of fluid from the wall of the gut with subsequent lysis of the obstructing meconium and passage per rectum. This technique was first described by Noblett.² The enema may be repeated in 24 to 48 hours if there is still obstruction.

However, it should be stressed that all cases of meconium ileus may not lend itself to this form of therapy, particularly when there is evidence of meconium peritonitis signifying perfora-

tion or when associated atresias are suspected. In the latter situations, the operative approach with decompression of the bowel, evacuation of the meconium, and with one of several surgical anastomoses is indicated.

It must be stressed that the post-operative prognosis of the child with meconium ileus lies with vigorous and continuous therapy of the pulmonary complications which will soon ensue. It is essential that these children receive the maximal effort in pulmonary care from the immediate newborn period.

PERFORATIONS

Spontaneous perforations of the gastrointestinal tract occur in early infancy, and present a true surgical emergency. The overall survival rate in these infants has generally not been better than 50 per cent. Perforations have been reported in anatomical locations from the stomach to the anus and in the majority of instances, when not associated with other anomalies, are seemingly without obvious cause.

Of particular interest are a group of perforations occurring in premature infants along the greater curvature of the stomach. Because these perforations may involve a long linear rent of almost the entire stomach, massive pneumoperitoneum and abdominal distention often results. However, other perforations in the duodenum and small bowel may also give rise to a considerable amount of intraperitoneal air. Fluid and electrolyte imbalance, peritonitis, and septicemia rapidly ensue, and unless treatment is prompt and vigorous, the infant may not survive.

ABDOMINAL X-RAY

Any infant with undiagnosed distention of the abdomen requires an abdominal x-ray. Unlike the adult patient, signs and symptoms of perforation may be lacking in the neonate; and the infant with a perforation characteristically may continue to feed until the problems of peritonitis and abdominal distention become grossly evident. As in the infant with neonatal ascites, massive distention of the abdomen which embarrasses respiratory efforts, should be treated with immediate paracentesis. Treatment of the perforation is that of laparotomy and surgical repair after intravenous antibiotics, fluids, and nasogastric suction have been instituted.

Gastrointestinal hemorrhage in the newborn infant is not a common problem. Although hemorrhage may occur secondarily to a number of gastrointestinal tract lesions, it is well to first consider that the infant may have a bleeding disorder and appropriate hematological consultation

should be obtained. Surgical intervention should be considered only when it is clear that the patient does not have a bleeding disorder and when conservative management has not led to cessation of bleeding.

Congenital aganglionosis of the colon, commonly known as Hirschsprung's disease, may cause acute obstructive symptomatology in the newborn infant. However, as most children with Hirschsprung's disease become manifested in later infancy or in the preschool years, it is easy to overlook this problem in the neonate particularly when the diagnosis is difficult and not at all obvious. Abdominal x-rays may mimic those of a paralytic ileus, and the barium enema may not show the characteristic disparity in size, which is so commonly seen in the older child between the dilated, proximal, ganglionic bowel and the contracted, distal, aganglionic segment. However, Hirschsprung's disease must enter into the differential diagnosis of any acute neonatal intestinal obstruction, particularly when the obstruction appears to be in the colon. Hirschsprung's disease in infancy may be further complicated by severe enterocolitis in the proximal obstructed intestine. This complication is a particularly lethal problem in the young infant and must be treated by an emergency decompressing colostomy above the aganglionic area.

It is therefore apparent that any infant, in whom the diagnosis of Hirschsprung's disease is suspected, should receive prompt attention. At the time of colostomy, it is essential to obtain a frozen section of the bowel at the colostomy site to be sure that the decompression has been accomplished in a normally ganglionic area. The colostomy, if possible, should be placed just proximal to the area of aganglionosis. When time and the patient's condition permit, definitive diagnosis may be made by colonic biopsy taken from the rectum above the level of the internal sphincter.

Although there is some recurrent interest in primary surgical pull-through procedures in the neonatal period using some of the newer surgical techniques, most surgeons would still prefer a temporary diverting colostomy with a pull-through procedure at a later date.

IMPERFORATE ANUS

Although the diagnosis of "imperforate anus" may be easily established by physical examination, the exact underlying embryological deformity is not always as apparent. Intelligent management of the infant depends upon an accurate embryological and anatomical knowledge regarding the level of deformity, the relationship of the rectal pouch to the levator ani sling mechanism

and the presence or absence of any fistulae, either internal or external. It is now appreciated that the term "imperforate anus" encompasses a multiplicity of anomalies of the rectum, anus and perineum. At a recent international congress of pediatric surgeons, 39 different deformities were documented.

Examination of the newborn with imperforate anus should include a close inspection of the perineum, particularly in the male, for a minute fistulous tract. These fistulae are often not apparent until several hours after birth when meconium has been forced into the tract making it visible. In the female, inspection of the perineum should include the area of the vestibule and lower posterior vaginal wall as fistulae are often present in these areas.

If a fistula is not present, the next step is that of the upside down x-ray as was originally described by Wangenstein and Rice.³ On these films, the relationship of the blind rectal pouch to the pubococcygeal line should be noted.⁴ If the pouch is well distended and ends above the line, one can assume that there is a "high," supralevator deformity and that the bowel has not passed through the levator sling. A rectal fistula in these patients enters either into the posterior urethra or bladder in the male, or into the high vagina or cloaca in the female. Any child with a supralevator deformity should be treated with colostomy in the neonatal period pending a definitive pull-through procedure at about one year of age. In situations where the deformity is infralevator or where there is a fistula to the perineum, a local perineal surgical procedure will usually provide egress for meconium without the need for a colostomy.

Infants with imperforate anus have an increased incidence of atresias elsewhere in the alimentary tract, especially in the esophagus, as well as a greater number of urinary tract anomalies. A nasogastric tube should always be inserted to check esophageal patency, and a subsequent intravenous urogram should become a routine part of the patient's diagnostic work-up.

★★★

2500 N. State Street (39216)

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—The Editors.

Youth and Drugs

CARL E. GUERNSEY, LL.B.

Jackson, Mississippi

I CAN SAY QUITE honestly that most of the information I have acquired regarding drug abuse has come from conferences with a wide range of authorities. The very fact that there is no central fountain of knowledge on this tremendous problem points up our inexcusable tardiness in dealing with one of the greatest crises of our time. We have profited greatly from our contact with Joe Moynihan, narcotic authority for the State Board of Health; we have worked closely with the Jackson office of the Bureau of Narcotics and Dangerous Drugs; we have sought the knowledge of the investigators for the State Board of Pharmacy; we have been given aid by the administrative heads of Whitfield and East Mississippi Hospitals. Much help has been given us by the Bureau of Narcotics and the crime lab for the Jackson Police Department and by the Highway Patrol Narcotic Division. Why is there no central source of information and why especially is there not a dynamic planning and action drug control authority in Mississippi?

There have been other sources of information for the remarks I make here—face to face confrontation with pitiable children of talent who cried for help to wrest them from the grip of narcotic addiction or dependency; and the obituaries of children I have known whose deaths have been caused or contributed to by inhalants or narcotics. Any person who has analyzed the trend of pyramiding drug usage knows that we cannot afford the spiraling economic and social cost. Any person who has seen the stark tragedy in the eyes of an addicted child must have a very personal reason for a commitment to action.

Presented before the Section on Preventive Medicine, 102nd Annual Session, May 13, 1970, at Biloxi. Presiding Judge of the Hinds County Youth Court, Jackson.

Drug addiction was for many years almost exclusively an adult problem. In 1958, only 3.8 per cent of arrested drug violators were under 25. In 1968, 3 per cent of arrested drug violators were

Drug use and abuse is a rising problem among American youth. The author, Presiding Judge, Hinds County Youth Court, points out the lack of drug authorities, information services, and avenues of treatment for youthful users. He discusses initial steps that could be taken in forming a comprehensive plan to deal effectively with this major social crisis.

under 15; 26.6 per cent were under 18; and 76.6 per cent were under 25. From July 1968 to July 1969, more than 6,200 children under age 15 were arrested for drug law violation in this country. Despite these facts, very few states have any kind of treatment program for the teen-aged addict and any one under 18 is excluded by administrative ruling from the narcotic hospitals at Lexington and Fort Worth administered by the National Institute for Mental Health, a division of the Department of Health, Education and Welfare.

I, here and now, charge the Department of Health, Education and Welfare with discrimination against youth in the operation of narcotic hospitals and with depriving the young of equal protection of the law. I submit that it is time they realized that addicted children are as much entitled to treatment as addicted adults. I do not pretend to know all the factors contributing to drug addiction and I doubt if anyone present

would claim such knowledge which would have to approach omniscience. Emotional or mental disorders or chemical unbalance, physical weakness or temporary depression can couple with drug experimentation or medical treatment to create addiction. Perhaps the greatest drug chaos of our time is the use and abuse of amphetamines by overweight Americans. Their story is told time after time in the admission records of mental hospitals. So diverse and complex are the causes of addiction that we err badly in our blanket condemnation of the drug addict or dependent.

In order to fully evaluate the drug problem which we encounter we must consider specific facts peculiar to this problem. Of all crime or health problems confronting our nation, drug addiction and dependency are the hardest to measure in scope. Both a felonious vendor and an addicted buyer will go to any extreme to conceal the fact of a crime committed or of a physical addiction indulged. It is not so with either bank robbery or cancer. We cannot presently solve the drug problem, and can't even measure it, and many persons in positions of prominence will not even admit that it exists. If we could determine the quantity of drugs used in violation of our laws, and we can't, we still would not know the number of users or the measure of their addiction or dependency.

INADEQUATE ENFORCEMENT

Federal, state and local law enforcement authorities are not yet geared to a drug traffic more than 10 times as great as that in the beginning of the 1960's. We have in Mississippi today fewer than 10 full time state narcotic officers, and only seven police departments in our state have narcotic units. Six of these have been established within the past year. This force is ill-equipped to deal with more than 1,000 drug users in our state, many of whom are actively recruiting new users.

Our criminal laws offer little or no alternative to long term sentences. By such sentences we can vent our public wrath on a perplexing problem without expending the energy required to seek its proper solution. We have not yet accepted drug addiction as a medical problem or treatment as an alternative to prison.

The comparative handful convicted of drug usage receive little or no treatment nor have our hospitals or prisons ever effectively cut off their source of supply, even during periods of confinement. In some places hospital attendants and

prison guards are our country's worst pushers, and they are protected by a monopoly any Wall Street broker would envy.

These are only a few of the many indications that our nation is still figuratively sitting on its hands, seemingly unwilling to commit itself to an intelligent and effective drug control program. If and when the State of Mississippi fixes attention and resolution on the drug problem and creates a drug authority, equipped with manpower, legal power and know how to cut this serious problem down to manageable size, a positive plan of action should be adopted. These nine steps should be at the heart of our solution as I see it:

(1) Drug education today is as faulty and inadequate as the sex education made available to my generation. We try to solve a very real problem with unreal answers, half truths and platitudes, and failing to impress, we threaten instant insanity. Just as our parents substituted, in many cases, scare tactics for facts about sex, so are we giving our children a "birds and bees" story about drugs. Drug education must be introduced intensively into the public school curriculum during late elementary years and continued through high school and based upon honest research and hard facts. Surveys indicate that only half a dozen school systems in the country have effective drug education programs.

(2) An intelligent drug control program must commence with a medicine cabinet inventory. Amphetamines, barbiturates, benzedrine, nail polish, glue, hair spray, gasoline and lighter fluid are all capable of providing children with the first step of a long trip, right in their own homes. No child will take seriously the drug advice of parents whose "uppers" and "downers" are a regular part of their lives.

(3) By legal requirement and cooperation of pharmaceutical and medical personnel, modern computer techniques can uncover the prescription shopper and the rare pharmacist or the rare physician who makes narcotics or drugs too easily available. Let me emphasize here that I fully appreciate the need for safeguards against witch-hunting and second-guessing regarding professional judgment on medication.

Names of druggists, physicians, patients and dosage of drugs could be easily keyed to a computer card which could be incorporated into a comprehensive record system. By proper inquiry of a mechanical brain we could have an instant accounting of the drugs a pharmacist buys and dispenses, those a doctor prescribes and those a patient receives. To avoid use of false names, patient's social security numbers could be used.

(4) In every area of crime, effective law en-

forcement is a part, but only a part of the solution. All the policemen in the world could not solve our drug problem unless and until the courts to which the cases are referred have treatment alternatives available. Nevertheless, drug traffic will never be broken without adequate numbers of well-trained narcotic officers. In addition to the shortage of state narcotic officers, one example of our deficiency in this area is the fact that the Federal Bureau of Narcotics and Dangerous Drugs had for nearly 40 years, until 1968, the same quota of 300 agents and the same budget as when that agency was founded. Narcotic officers are so rushed that many times there appears a laissez faire attitude toward the user and a concentration only on source of supply. It is equally important that the user, as well as the seller, know the consequences of narcotic law violation, and there must be vigorous pursuit of the illegal drug consumer.

(5) Just as there must be legal deterrents on the user of drugs and a price paid for proved use or possession, so must there be an avenue of voluntary withdrawal. Such alternative is available through youth crisis centers, sanctuaries with legal immunity where a drug user can seek and find with amnesty, treatment for the acute physical ills of drug usage, therapy for the emotional lameness which contributes to drug dependency, and there must be available referral to long range services. Many addicts are earnestly seeking a bridge back to normal life and youth crisis centers can serve as one of society's expressions of concern and help.

(6) Too much time is spent in the debate between advocates of long and short term sentences for addicts. The length of time segregated from society is not nearly as significant as the nature of confinement. There are situations in which the present use, possession and sale sanctions are absolutely essential, but there are also cases in which probation and treatment are indicated.

Recently, in San Antonio, Texas, a heroin ring was broken and 92 pounds of pure heroin was confiscated. This haul represents 25 million dollars on the drug market. Those arrested could hardly be considered fit subjects for probation or short term sentences.

Right now, in this county, Mississippi's first heroin traffic case is being prosecuted. I do not propose leniency here. Unless we deal effectively with young persons caught in the early stages of experimentation they might easily graduate from use to sale, from marijuana to heroin. Lest I be accused of contributing to false drug information let me say categorically here that there is documented proof of correlation between marijuana

use and subsequent heroin addiction. A California study during the period from 1960 to 65 established that one out of eight persons convicted of marijuana use were also convicted of using heroin within five years thereafter. Smugglers from Mexico supply an estimated 800,000 marijuana users per year. What will the heroin picture be five years from now? We must not relax our present sentencing structure for drugs, including marijuana, but we must place treatment alternatives within the grasp of trial judges.

(7) In the field of drug addiction as in the field of alcoholism, society has such a vested interest in the addicted individual that it has a right to enforce withdrawal and treatment as an alternative to confinement. We cannot continue under the assumption that only the well motivated addict can be helped. It is suggested that in this area, as in the area of treatment of the resistive psychotic, research can make techniques available to change attitudes of determined users and can fortify a resolve to abstain.

TREATMENT FACTORS

Let us be perfectly frank about one thing—the patient is not always the only reluctant participant in the treatment process. There is a medical factor in the treatment of practicing addicts and alcoholics. It cannot be passed off as either a psychiatric or law enforcement problem on any moral or any professionally logical grounds. The arbitrary unwillingness of many physicians to treat alcoholics or drug addicts is no more defensible than refusal to treat numerous other patients whose ailments are caused or contributed to by the human will. An addict is as much entitled to treatment as an ulcer patient. Society has a right to demand that an addict accept medical treatment. What demand, if any, do the needs of the community and the Hippocratic oath impose upon the internist to provide that treatment?

Candor must overcome courtesy at this point. The oldest known drug in our society is alcohol, but the medical profession as a whole has shown extreme reticence in tackling the basic problem of alcoholism. Although some more fortunate alcoholics may be admitted to some hospitals on such veiled diagnoses as gastritis or dehydration, alcoholic admissions to medical wards are extremely rare. Of equal significance is the attitude of many practitioners that the acute medical problems of alcoholism must await treatment until sobriety is restored or until psychiatric treatment has passed some mystical point. This does not get the job done with the alcoholic and will succeed even less with the drug addict.

(8) The very heart and soul of effective drug

control must lie in a long term treatment program with a three stage course of action. The first stage, which must be conducted under close confinement, is that of physical withdrawal from drugs and restoration of the body. This should include treatment of organic damage including maximum recovery from brain, liver, kidney and respiration dysfunction. It should include a physical fitness program approaching the program of military service to provide the morale factor of maximum health.

Step two, perhaps the most difficult, would be the treatment of the emotional aspects of addiction. Although every member of this audience is more capable of evaluating this premise than I am, it is suggested that addiction or dependency is both a cause and an effect of emotional problems, many of them treatable. Many children with drug problems come back from evaluation with a diagnosis of passive aggressive personality disorder or adolescent adjustment reaction. With either diagnosis, therapy has proved helpful in similar cases. The fact that the problem has manifested itself in drug experimentation does not alter the fact that there is an underlying emotional disorder. How much by way of therapy must be provided in a closed ward and how much can be handled on an outpatient basis, conceivably in a community mental health clinic, remains to be seen.

The third and final stage of the treatment process is to train or re-train the addict for successful participation in society. Addiction strikes many at such an early age that it cuts off the individual's preparation for a life work. Often the addict is an excessively bright person equipped by education to be no more than a service station attendant or a short order cook. Such a person is destined for frustration and could be expected to seek escape from what he sees as life's cruelty in the pleasurable anesthesia he once knew. I do not suggest that vocational training is the only essential of the process of returning addicts to society, but it is a most significant one.

Other problems in re-socialization of the addict would be the establishment of acceptable pastimes and the formation of new contacts, possibly through such groups as a synanon, the addict's equivalent of Alcoholics Anonymous. Total restoration would be different in every case and would depend upon multiple variations of physical, mental, emotional and spiritual support.

(9) The ninth and final step in a total drug control program would be an after care program for addicts with some of the components of the present parole system. Just as a parole from prison is now a conditional privilege, release from a treatment center should also be. We should not hesitate for the sake of society and the individual user to utilize Naline which causes immediate withdrawal syndrome or polygraph tests to determine that the user does not revert to old practices. It is postulated that individuals with defective conscience can find reinforcement for abstinence from the certainty that use would be detected.

The program which is blueprinted here is one of unquestionable expense. It is also one which calls for a re-thinking of legal and medical concepts. To such truths I can only say that the alternative is even greater economic loss, chaos and the destruction of multiplied thousands of human lives.

We must not fall into pitfalls which have threatened our approach to other social problems. There is no quick and easy solution to the drug problem nor is there a miracle cure for drug addiction. At the same time, this problem is of such major proportion that we cannot afford the luxury of punitive self-righteousness. We cannot punish our national drug problem out of existence any more than we can hide our heads ostrich-like in the sand and say we have no problem.

I do not suggest that the blueprint which I have set forth is a panacea for drug abuse. I do propose it as a beginning point in a comprehensive plan to deal effectively with a major social crisis confronting the American people. ★★★

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Radiologic Seminar CI

Roentgen Changes in the Sella Turcica in Pituitary Tumors

LYNDON M. CONLEY, M.D.
Houston, Mississippi

THE LOCATION of the pituitary gland in relation to the sella turcica is such that a pituitary tumor can readily produce changes in the sella which can be demonstrated on plain skull films.

The vast majority of pituitary tumors are adenomas, either chromophobe in type or chromophilic in type. The chromophilic adenomas may either be of the acidophilic or basophilic type and make up about 20 per cent of these tumors. Chromophobe adenomas make up about 80 per cent of the tumors. Adenocarcinoma and adamantinomas of the pituitary gland may occur, but they are rare.

The roentgen findings are the result of pressure atrophy caused by direct contact with the tumor. Basophilic and acidophilic adenomas may cause marked symptoms without demonstrable changes in the sella. Chromophobe adenomas can also be large enough to produce neurological signs, especially from pressure on the optic chiasma, without producing x-ray changes in the sella.

A typical early deformity is simultaneous atrophy of the dorsum sella and the floor of the sella turcica. The dorsum first becomes thinner and more concave and appears pushed backward causing an increase in the sagittal dimension of the fossa. This then may go on to complete destruction of the dorsum and the posterior clinoid process. At the same time the floor of the sella becomes thinner and more depressed and finally encroaches on the sphenoid sinus. The tumor may produce changes on one side more than the other. The anterior clinoid processes do not, as a rule, share in bone atrophy in connection with pituitary tumors.

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, Houston Hospital, Inc.

Calcification can occur in pituitary adenomas. Malignant tumors tend to be more rapid in growth and to destroy by infiltration.

Clinically, hypopituitarism is usually associated with chromophobe adenomas. In children, this results in pituitary dwarfism. In adults, there is loss of energy, easy fatigability, and lack of libido. There is also frequently a superior quadrant defect in the temporal visual field followed by progressive changes and finally a loss of vision.

Pituitary acidophilism in childhood results in gigantism. In adults, there is acromegaly.

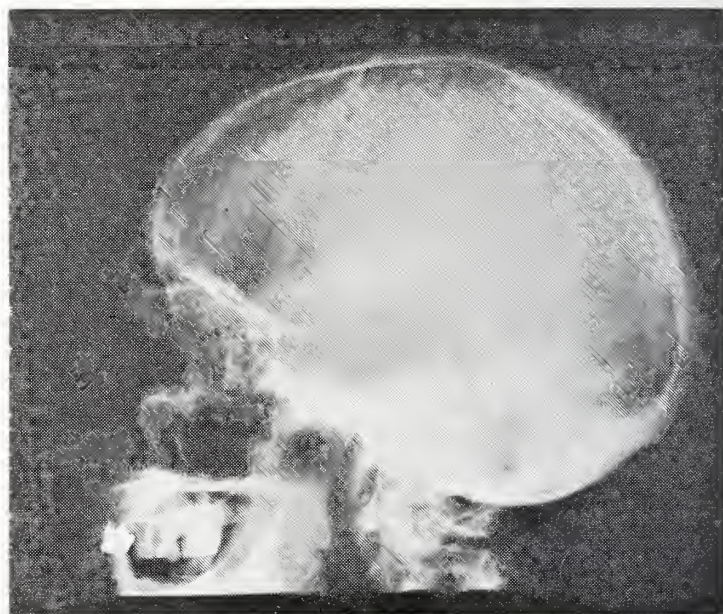
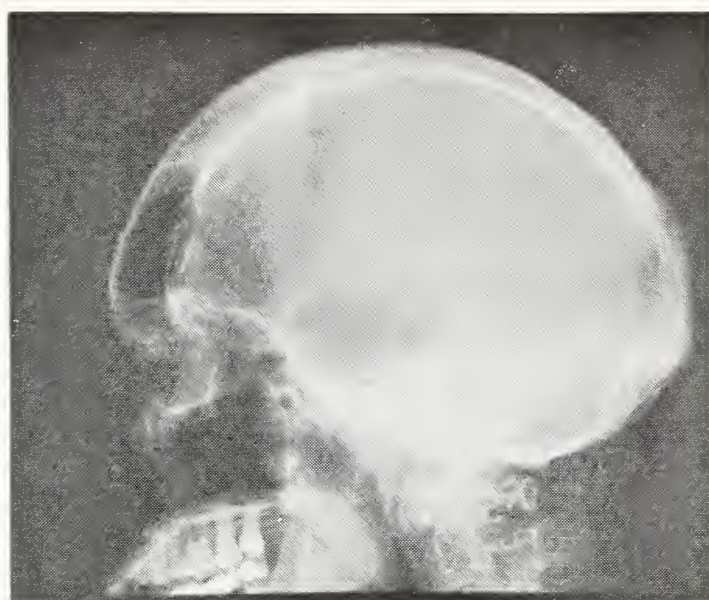


Figure 1. Note erosion of floor of the sella and destructive changes in anterior and posterior clinoids.

Pituitary basophilism results in a particular symptoms complex identified by rapid and painful obesity, hypertrichosis and amenorrhea, high red blood cell count, high hemoglobin, high blood pressure, kyphosis, abdominal purplish stiae, high cholesterol, glycosuria, and general osteoporosis. The syndrome is more common in females.



Figure 2. Note rounding of the sella turcica, undermining of the anterior clinoid process and thinning of the dorsum sella, producing so-called "ballooning."



3. Note extensive destructive changes in dorsum and posterior clinoid process. Also demonstrated is enlargement of the paranasal sinuses commonly seen in acromegaly.

It should be noted that changes in the sella turcica are not limited by any means to tumors of the pituitary gland, although pituitary tumors are the most common cause of enlargement of the sella. Craniopharyngiomas (Rathke pouch tumors), suprasellar or tuberculum sella meningiomas, and aneurysms of the adjacent intracavernous portion of the internal carotid artery may also produce enlargement and destruction of the sella. Also, dilatation of the third ventricle with increased intracranial pressure may produce these changes.

Recognition of gross changes in the sella turcica is usually an easy matter. More subtle, earlier changes may easily be overlooked unless one measures the sella. Normally on the lateral x-ray the greatest anteroposterior diameter in the adult will not exceed 17 mm., and the depth will not be greater than 13 mm. Other measurements including area calculations may be informative in borderline cases. Also, one must not lose sight of the fact that borderline cases of enlargement, without symptoms pointing to a lesion in this area, exist. In most of these cases further investigation by arteriography and pneumoencephalography will reveal no evidence of abnormality.

Following are three examples of x-ray findings in pituitary tumors:

Case No. 1. This patient was originally seen because of injury and the skull x-rays showed extensive changes in the sella turcica. There is noted erosion of both anterior and posterior clinoid processes and erosion of the floor of the sella.

The patient apparently gave a history of progressive loss of vision over a period of time.

Case No. 2. This patient presented symptoms of acromegaly. This sella turcica does not show as extensive changes as in Case No. 1. The changes in this case are seen mainly as erosion of the floor of the sella turcica. Also, in this case, the findings appear to be more pronounced on one side than on the other. Arrows outline the floor of sella.

Case No. 3. The patient also presents clinical findings of acromegaly. Here again, there are extensive changes in the sella turcica. The dorsum and posterior clinoid processes show evidence of destruction, and also the floor of the sella, while the anterior clinoid processes appear intact.

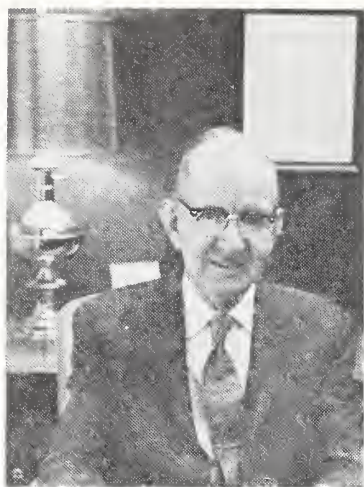
In conclusion, the pituitary gland is located in an area where a tumor can produce changes in the sella turcica which can be of diagnostic significance on plain films of the skull, although tumors of the pituitary can cause clinical findings without appreciable changes in the sella turcica.

★★★

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The President Speaking

‘A Busted Play?’

PAUL B. BRUMBY, M.D.
Lexington, Mississippi

DURING THE 1970 FOOTBALL SEASON, we have seen the busted play which, on occasion is turned into a gain by an alert offense. This is a fair description of consideration of H.R. 17550, the Social Security Amendments of 1970, now before the Senate Finance Committee after passage by the House of Representatives. We are concerned with amendments to Titles V (Maternal and Child Welfare Grants), XVIII (Medicare) and XIX (Medicaid). Especially are we interested in peer review, a program of American medicine to which the Congress has taken a liking.

Sen. Wallace Bennett (R., Utah), basically a conservative, introduced Amendment No. 851 to the bill, providing for a Professional Standards Review Organization. Apart from this, he is a cosponsor of AMA's Medcredit and PRO, the kissing cousin to his PSRO. It is in the latter that medicine has found reason to record objections. PSRO, while maintaining in principle the concept of physician review of medical services, goes too far and is too punitive in certain aspects.

AMA's testimony hit hard on points of objection: Limiting peer review to physicians' services and not including those of other providers, i.e., hospitals, dentists, etc.; the punitive provisions, including fines for infractions; and the requirement for prior approval in admissions for elective procedures.

The Senate Finance Committee receded from most of this hard line position by limiting physician review to medical services by physicians, substituting "professional persuasion" as the first resort for blatant misuse instead of fines, and by eliminating the prior approval requirement, leaving the matter in the hands of the review organization. Still dangling are the composition of the review body and priority to state medical associations in determining who shall perform this task.

We should support AMA's position and give new and important impetus to the Mississippi concept of peer review approved by our House of Delegates and implemented by our competent Committee on Peer Review. This is one busted play which can be turned into a touchdown. ★★★



Mississippi Peer Review: The Practicing M.D.'s Own Plan

I

PEER REVIEW is the newest American medical household word. It has no hidden or surreptitious meanings, no clandestine connotation, nor subversive intent. As far as the Mississippi State Medical Association is concerned, peer review means what it says: Physicians' managing their own house with review of the quality and costs of medical care.

At the 102nd Annual Session in May 1970, peer review was the most-discussed and voted on issue before the House of Delegates. It was the heart of the president's address and the subject of a supplemental report of the Board of Trustees. Open debate on it was conducted before the best-attended reference committee, and the delegates voted on it, directly and indirectly, three times. All votes were overwhelmingly affirmative with no opposition recorded.

The House of Delegates created a constitutional Committee on Peer Review and gave it one of the most massive assignments ever handed to a committee. The nine-member body, geographically apportioned by association districts so as to be representative of the practicing profession, has conducted four meetings, despite the fact that the 1970-71 association year has not yet reached

the half-way mark. The committee has reached out to touch elements of the health care team and voluntary and government financing mechanisms which have never before had liaison with the association.

Peer review is a going concern in Mississippi, operating under association aegis, association definitions, association policies, and physician leadership. But recent legislation before the final hours of the 91st Congress has stirred some doubts about peer review, and regrettably, much misinformation about it has been circulated. In most instances, this is a matter of misunderstanding. The time has come to restate association policy as established by the House of Delegates and to describe constructive effort and work by the new committee. In brief, we are going to clear up peer review pollution and get on with the job.

II

"Our names are labels, plainly printed on the bottled essence of our past behavior," wrote Logan Pearsall Smith. For American medicine, peer review is nothing new. In 1955, the grievance committee mechanism, designed to prevent and resolve differences between physician and patient was standardized among almost all medi-

EDITORIALS / Continued

cal societies. In 1968, fee review was approved by the state medical association. The following year, peer review began to take shape under the leadership of Dr. James L. Royals, the 1969-70 president.

"Within our own ranks," Dr. Royals said, "we must develop a working system of peer review as an effective instrument of self-regulation. The unacceptable alternative—and it is virtually upon us—is submission to third parties who would sit in judgment upon the quality of care and the price paid for it."

The president emphasized that "physicians are best equipped to make these judgments, but we must make responsible and worthy judgments if we are to have them accepted."

"Perhaps most important of all," Dr. Royals reminded, "is the thrust of peer review which is not punitive but educational and corrective. We must learn to work in harmony with peer review and honor the judgments of our colleagues. Otherwise, we shall certainly be judged by others."

Frequently, Dr. Royals said in speeches, presentations to the Board of Trustees, and even in conversation that he "wanted no insurance company or third party judging me and my professional services. I want other physicians to review my services to my patients."

This, then, is the Mississippi State Medical Association Peer Review program which combines the functions and responsibilities of the old grievance committee, the fee review activity, and now the umbrella of peer review for quality, delivery, and cost of care. The association definition, since formalized in the By-Laws, includes but is not limited to resolution of differences between patient and physician, review of the quality of medical care, adequacy and/or reasonableness of fees whether due or paid from private or public sources, and liaison with private and public sources of medical care financing.

In its special report which was approved by the House of Delegates, the Board of Trustees offered precise definitions: "Peer review operates essentially in two areas, scientific and economic. Scientifically, we are concerned with the quality of medical care. We are interested in the organization and delivery of care and availability and accessibility. We are just as interested in problems of underutilization of health care resources as we are in overutilization, a wasteful drain on manpower, facilities, and funds.

"Economically," the Board continued, "peer

review is a two-way street. We are interested in fair and just compensation for quality services rendered, preferably under the concept of usual and customary fees which we have also endorsed. We are equally concerned when there is reason to believe that excessive charges have been made or when any charge relates to what physicians may determine to be an unnecessary service. We are interested in proper and optimum and maximum benefit use of the health care dollar, whether personal and out-of-pocket or from tax (public) sources."

Almost no major program of the association has been implemented so rapidly or so competently as the peer review project. And it has been done under an association-forged program by association members in a constitutional frame of reference and crystal clear policy established by the House of Delegates.

III

Enter now upon the American medical scene H.R. 17550, the Social Security Amendments of 1970, which is concerned in no small way with Medicare and Medicaid. The combined federal tab on these programs is about \$15 billion per year, and they have extended the medical care purchasing base by almost 40 million Americans. It is not in the least astonishing that the Congress would have a logical concern about get-



ting the most for the public health care dollar.

AMA's Medcredit bill (Medcredit: Delivery System in AMA's Image, J.M.S.M.A. XI:69-71 (Feb.) 1970) took this into account by proposing a Peer Review Organization (PRO) under state medical association control and sponsorship. Since introduction of the measure, a separate PRO bill has been dropped into the hopper with nearly 30 Congressional sponsors.

Meanwhile, H.R. 17550 cleared the House of Representatives and went to the Senate where Sen. Wallace Bennett (R., Utah) offered Amendment No. 851 which would establish a Professional Standards Review Organization (PSRO). The Bennett amendment, while closely parallel to AMA's PRO, has some rough edges and punitive provisions. Nobody in the Senate, no member of the Senate Finance Committee which received the bill and amendment, and especially Sen. Bennett himself expect Amendment No. 851 to be enacted into law as initially drafted.

In testimony before the committee, Dr. William O. LaMotte, Jr., of Wilmington, Del., chairman of the AMA Council on Legislation, made medicine's objections to portions of the amendment quite clear. He asked that priority on contracts with state medical associations for PSRO activities be mandatory, as opposed to contracts with "medical societies." He asked that composition of the PSRO be specified, as it is in AMA's PRO.

Dr. LaMotte objected to prior authorization for elective procedures, and he found the punitive provisions unacceptable. Moreover, the AMA testimony stressed, PSRO reviews the full spectrum of health services, whereas PRO is concerned only with physicians.

That the AMA testimony was effective is seen in changes made in PSRO. The prior authorization requirement for elective procedures was sacked, and separate review mechanisms were authorized for each provider field, i.e., physicians reviewing physicians and dentists reviewing dentists. "Professional persuasion" was prescribed for findings of unnecessary surgery or overutilization of hospital facilities as a measure of first resort—not punitive measures.

While these processes were developing, some became apprehensive about the Bennett amendment, forgetting for the moment that the senator from Utah is no wild-eyed liberal. His intention parallels that of AMA. It has been a matter of adjusting viewpoints, clarifying language in proposed law, and bringing together the parties at essential interest in the medical care plans affected.

IV

What began as a logical extension of grievance and fee review committee activity suddenly found itself in federal and federally-assisted health care plans. All of this is to say that peer review is for real, and it is rapidly becoming a matter of fish or cut bait for state medical associations. Nobody should be surprised that where a state medical association is unwilling or unable to conduct its own peer review, the Secretary of HEW will do it for the organization.

The few who became overly alarmed at the Bennett amendment made their fears known before the Senate Finance Committee hearings were complete or the tentative position of the committee was announced. One state medical association called a special session of its House of Delegates *before* the hearing was conducted and condemned peer review.

But here in Mississippi, the association has acted with foresight and prudence. The clear-cut policy, the sound organization under the Committee on Peer Review, the stability of leadership, and a host of sensibly planned and executed actions make the Mississippi peer review system one to be emulated. In Dr. Royals' words, we are on our way to being masters of our own house.—R.B.K.

Be Sure to Answer NORC's Call

Four thousand two hundred American physicians in private practice may soon be interviewed on costs of health care and use of medical services by their patients. It is all part of a landmark study by the Center for Health Administration Studies and the National Opinion Research Center (NORC) of the University of Chicago. AMA has endorsed the project.

NORC is initiating its fourth study of care cost and use of medical services by American families. The purpose is to measure the effectiveness of health insurance, commercial and Blue plans, in meeting the costs of care. Only those families purchasing medical care in the past year will be in the sample. When, in the course of the family interview, a physician's name is mentioned, the research organization will ask the interviewee's permission to query the doctor.

The NORC interviewer will present the physician a letter of introduction and endorsement from Dr. Ernest B. Howard, executive vice president of AMA. Information sources, identity of

those interviewed, and information derived from the sessions, are, of course, held in strict confidence.

As some physicians know, these insurance effectiveness studies are not new. NORC has conducted three, in 1953, 1958, and 1963, and they have become standard references on authoritative information on health insurance effectiveness. The interview of families selected in the sample will be comprehensive and lengthy. Not so with the physician interviews which are more in the nature of verification inquiries.

The support of Mississippi physicians is requested in this project which will be immensely valuable to American medicine, voluntary prepayment, and insurance carriers in measuring the impact of voluntary health care financing on costs. When the doorbell rings, if it's NORC instead of Avon calling, we ask your help.—R.B.K.

The Passing of the Panama

The Panama Limited, perhaps the last of the nation's great passenger trains, will be no more after Nov. 23. The passing of the Panama hardly seems a fit subject for editorial comment in a medical journal, but this train has figured prominently in the lives of hundreds of Mississippi physicians.

Consider how, during the 40-odd years that Nos. 5 and 6 of the Illinois Central Railroad plied the Main Line of Mid-America, many Mississippi M.D.'s and their families regarded it as the only way to and from a Chicago medical meeting. How many more medical students, now in practice, savored the luxury of Panama transportation between New Orleans, Memphis, St. Louis, and Chicago and their respective Mississippi homes?

And consider the impressive list of IC surgeons from McComb City (as the conductor always said) all the way up to Batesville who cared for the crews and maintenance teams. In fact, it was an unusual night when there wasn't a physician headed north on the Panama or when no M.D. checked in at the first gate in the just-south Chicago IC station.

The Panama Limited is a victim of progress, shifting values, and changing times. During 1969, operation of the train lost \$1 million for the IC, and equipment obsolescence is another prime con-

sideration. The two train units, diesels and cars, are 25 years old. Despite excellent—and expensive—maintenance, they need replacing, and the tab on this is \$7 million. IC officials point out that they haven't that kind of investment capital to put into a losing proposition.

To many Mississippians, the Panama is more of an institution than a common carrier. Luxury and personal service were the bywords during the happy, halcyon hours of travel in the all-Pullman streamliner. The cheerful, competent porters and waiters took pride in long service and professionalism. The bedroom was invariably immaculate, and you always wondered how the luggage got there ahead of you with bags neatly stowed away and coats hung on real wood hangers.

Then there was the club car, the complimentary Kauna cheese with the refreshments, and a handy copy of the *Times Picayune* or *Chicago Tribune* to peruse. Dinner was a state occasion on the two-car diner with crab fingers, Great Lakes whitefish, and a charcoaled steak two inches thick. And as at the *auberge* adjacent to the gourmet restaurants in Lyons, the bed was turned down for the well-nourished traveler upon return to the Pullman.

Breakfast was no less a ceremony of good service and excellent food. The steaming coffee, thick French toast with real maple syrup, the



"That's the third one this week, O'Brian. . . . We make a pretty good team."

morning papers, and gleaming silver on flawless napery started the day just right. Overnight, the shoes had been shined, too.

Just how, if all this is true, can a mobile population let the Panama pass away? Time and schedule pressures are the primary reasons, because Delta and Southern require only two hours to do what the Panama did in 14 hours. And there is the matter of transportation economics: A single DC-9 jet can carry more passengers between Chicago and New Orleans in a week than both Panamas can in a month—for much less money, too.

American railroads, unquestionably the winners of the west in the 19th century, haven't had a fair shake in the 1900's. Whereas the air lines enjoy the use of modern terminal and airport facilities built by cities with federal aid, the railroads must purchase their right-of-way, build and maintain tracks, and pay taxes on the whole shebang.

The air lines enjoy use of the world's best highway system with 100 per cent federally financed and supported VOR navigation facilities and terminal radar. The railroads buy, install, and operate their own communications and signal systems, just as they must provide for "terminal" facilities in stations. Almost half of the team backing up the jet are on the federal payroll, but about the only federal salary implicit in the railroad picture is that of the U. S. district attorney who sues it.

So the passing of the Panama convokes a happy and simultaneously sad nostalgia as it marks the end of an era. It also reminds us that transportation economics need a second look.—R.B.K.

Bloody Tort: Liability Without Negligence

The Illinois State Supreme Court has shaken up hospitals and physicians in its decision in *Cunningham v. MacNeal Memorial Hospital*. The tribunal applied the products liability doctrine to blood supplied for human transfusion, even though no negligence was involved.

The suit was brought when one Frances Cunningham sought damages for blood received which caused hepatitis. The trial court found for the defendant hospital which had not been negligent. On appeal, the Supreme Court found for the plaintiff, stating that "it is no defense for the hospital to show that it had done everything possible to preclude the existence of the virus." By remanding the case to the lower court for retrial

under strict tort liability doctrine in product litigation, the high court defined blood as a product and not a service.

Mississippi was one of the first four states to secure a legislative enactment defining blood transfusion as a service and not a sale. The doctrine, therefore, would not and could not apply here. Altogether, 25 states have this vital law on the books. Illinois, unfortunately, does not.

Bernard D. Hirsh, general counsel of AMA, said that "this doctrine, applied previously to commercial products, imposes liability for unlimited damages for injuries caused by a defective or contaminated product, regardless of whether the defect or contamination was caused by negligence, and regardless of whether it is possible to prevent the defect or contamination.

"As applied to blood for transfusions," Mr. Hirsh continues, "this doctrine would appear to create a serious financial hazard in the use of blood for transfusions in medical care. Even if insurance protection can be obtained, it seems likely to have a substantial effect of increasing the general cost of medical care."

Both the Illinois State Medical Society and Illinois Hospital Association went to the Supreme Court in the case as *amici curiae* or friends of the court who had a substantial interest in the outcome of the case. As it turns out, they did, because hospitals and physicians stand naked and virtually defenseless before the decision, easy prey to damage suits even where no negligence is present. And exactly half of the states have a new reason for concern in tort liability.—R.B.K.

Sen. Eastland Helps the Chiropractors

It is disquieting to learn that Sen. James O. Eastland, the respected and powerful leader in the U. S. Senate, cosponsored a bill to include the services of chiropractors under Medicare's Part 1-B. In fact, there is every reason in the world for the senator to withhold his immense prestige and influence from such, because he represents one of the two states which refuse to place the badge of respectability and legality on this cult.

But it is true, because Sen. Eastland has joined as a cosponsor with Sen. Clinton Anderson (D., N. Mex.) for S. 1812, "a bill to amend Title XVIII of the Social Security Act so as to include chiropractors' services among the benefits provided by the insurance program established by Part B of such title."

There is further reason for the senator's having avoided this action: Just about every agency, organization, and individual with the smallest modicum of interest in health care delivery have denounced chiropractic for the quackery it is.

The AFL-CIO opposes chiropractic, as does the Senior Citizens of America. President Nixon's Task Force on Medicaid and Medicare slammed the cult. The National Advisory Commission on Health Manpower gave the spine punchers the shaft, and even former HEW Secretary Wilbur J. Cohen, hardly the president of the AMA fan club, denounced it with a fervor difficult to describe and a logic impossible to refute.

The House Committee on Ways and Means turned the cultists away, and HEW has recommended to the Congress that "a legislative amendment should be enacted denying financial participation in Medicaid payments to chiropractors. . . ."

The American Chiropractic Association, reporting its 1970 national convention in Hawaii, said in its journal that "to help make the convention a successful one and to give cause for extra celebration, convention goers were treated to the good news that U. S. Senator James Eastland of Mississippi had cosponsored S. 1812 now being considered by the U. S. Senate for chiropractic inclusion in Medicare."

The chiropractors were so ecstatic about the powerful Mississippian that they failed to mention the name of Sen. Anderson, their legislative angel, at all.

We hope that Sen. Eastland, who has always commanded our respect and admiration for his exercise of statesmanship, will withdraw his influential endorsement from this harmful proposal. —R.B.K.

Pediatric Heart Disease Course Slated

"Congenital and Acquired Heart Disease in Infants and Children," a pediatric cardiology postgraduate course, will be presented by the American Academy of Pediatrics and the Department of Pediatrics of the University of Florida College of Medicine, Dec. 9-12, 1970.

The seminar will convene at the Happy Dolphin Inn, St. Petersburg Beach, Fla. Inquiries and requests for registration forms should be directed to Dr. Gerald Hughes, Secretary for Educational Affairs, American Academy of Pediatrics, P. O. Box 1034, Evanston, Ill. 60204.



POSTGRADUATE CALENDAR

November 4, 1970

THROMBOEMBOLIC DISEASE: THE PCLOT THAT KILLS

University Medical Center, Jackson

November 4, 1970, beginning at 9:30 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Participants:

Kenneth R. Bennett, M.D., assistant professor of medicine, The University of Mississippi School of Medicine, and director of the coronary care training program, Mississippi Regional Medical Program

H. Davis Dear, M.D., assistant professor of medicine, The University of Mississippi School of Medicine

C. Jay Kees, M.D., instructor in radiology, The University of Mississippi School of Medicine

John D. Morgan, M.D., instructor in medicine, The University of Mississippi School of Medicine

Francis S. Morrison, M.D., associate professor of medicine and instructor in clinical laboratory sciences, The University of Mississippi School of Medicine

Joe Robert Norman, M.D., professor of medicine, Christmas Seal professor of respiratory diseases, and associate professor of physiology and biophysics, The University of Mississippi School of Medicine

Roland B. Robertson, M.D., assistant professor of medicine, The University of Mississippi School of Medicine

Arthur A. Sasahara, M.D., assistant professor of medicine, Harvard Medical School, Boston, Massachusetts; assistant chief, Medical Service, and director, Cardiopulmonary Laboratory, Veterans Administration Hospital, West Roxbury, Massachusetts

Hiliary H. Timmis, M.D., associate professor of surgery, The University of Mississippi School of Medicine

T. Walter Treadwell, M.D., assistant professor of medicine, The University of Mississippi School of Medicine, and associate director of the chronic pulmonary disease training program, Mississippi Regional Medical Program

Henry B. Tyler, M.D., clinical instructor in surgery, The University of Mississippi School of Medicine

Myra Tyler, M.D., associate professor of medicine and director of pulmonary research, The University of Mississippi School of Medicine, and director of the chronic pulmonary disease training program, Mississippi Regional Medical Program

Wednesday Morning

CLINICAL SETTING

Dr. M. Tyler

ANTICOAGULANTS: OLD AND NEW

Dr. Morrison

DIAGNOSIS

Dr. Sasahara

SANDWICH SEMINARS

ANTICOAGULATION—Dr. Morrison

BEDSIDE DIAGNOSIS—Dr. Treadwell

EKG AND PULMONARY EMBOLISM—Dr. Bennett

SURGICAL THERAPY—Dr. Timmis

TREATMENT OF THROMBOPHLEBITIS—Dr. H. Tyler

BLOOD GASSES—Dr. Morgan

PULMONARY ARTERIOGRAPHY AND SCANS—Dr. Kees

ENZYMES—Dr. Robertson

Wednesday Afternoon

PATHOPHYSIOLOGY

Dr. Norman

CURRENT THERAPY

Dr. Sasahara

PROPHYLAXIS

Dr. Dear

December 11, 1970

INFECTIONS IN OBSTETRICS AND GYNECOLOGY SEMINAR

University Medical Center, Jackson

December 11, 1970, beginning at 8:50 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Center for Disease Control, U. S. Public Health Service

Participants:

Alfred W. Brann, Jr., M.D., assistant professor of pediatrics, assistant professor of medicine, instructor in physiology and biophysics, and director of newborn services, The University of Mississippi School of Medicine

John Kitchings, M.D., clinical assistant professor of obstetrics and gynecology, The University of Mississippi School of Medicine

James Lucas, M.D., assistant to the chief, Venereal Disease Branch, Center for Disease Control, Atlanta, Georgia

John Sever, M.D., head, Section on Infectious Diseases, Perinatal Research Branch, National Institute of Neurological Diseases and Stroke, National Institutes of Health, Bethesda, Maryland

Donald Sherline, M.D., associate professor of obstetrics and gynecology and instructor in anesthesiology, The University of Mississippi School of Medicine

Henry A. Thiede, M.D., assistant dean, professor of obstetrics and gynecology, and chairman of the department, The University of Mississippi School of Medicine

William Wiener, M.D., clinical associate professor of obstetrics and gynecology, The University of Mississippi School of Medicine

Gary Wood, M.D., assistant instructor in obstetrics and gynecology, The University of Mississippi School of Medicine, and senior resident, University Hospital

Robert Yelverton, M.D., assistant instructor in obstetrics and gynecology, The University of Mississippi School of Medicine, and senior resident, University Hospital

Friday Morning

CURRENT DIAGNOSIS AND THERAPY: GONORRHEA

Dr. Lucas

PELVIC INFLAMMATORY DISEASE

Dr. Wood

VAGINITIS AND CERVICITIS

Dr. Wiener

PANEL: VENEREAL DISEASE

Dr. Lucas, Dr. Wiener, Dr. Wood

VIRAL DISEASE IN PREGNANCY

Dr. Sever

Friday Afternoon

SEPTIC ABORTION

Dr. Yelverton

ANTIBIOTIC THERAPY DURING PREGNANCY

Dr. Thiede

PANEL: PREMATURE RUPTURE OF MEMBRANES

Dr. Kitchings, Dr. Brann, Dr. Sherline

MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

November 30-December 4, 1970

CARDIOLOGY INTENSIVE COURSE

University Medical Center, Jackson

November 30, December 1, 2, 3, 4, 1970, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

POSTGRADUATE / Continued

Coordinator:

Patrick H. Lehan, M.D., professor of medicine and Mississippi Heart Association William D. Love research professor of cardiology, The University of Mississippi School of Medicine

This one-week intensive course is designed to familiarize family physicians with current concepts in bedside diagnosis of heart disease, aided by pulse tracings, photocardigrams, electrocardiograms, x-rays, and hemodynamic data. Participants will round, observe cardiac catheterizations and join the cardiovascular team's discussions on management of patients.

*November 30-December 4, 1970, and
January 11-15, 1971*

NEUROLOGICAL DISEASES AND STROKE INTENSIVE COURSE

University Medical Center, Jackson

November 30, December 1, 2, 3, 4, 1970, and
January 11, 12, 13, 14, 15, 1971, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinators:

Robert D. Currier, M.D., professor of medicine (neurology), The University of Mississippi School of Medicine, and co-director of the demonstration stroke unit, Mississippi Regional Medical Program

Robert R. Smith, M.D., associate professor of neurosurgery, The University of Mississippi School of Medicine, and co-director of the demonstration stroke unit, Mississippi Regional Medical Program

This one-week intensive course, one of the seven Mississippi Postgraduate Institute in the Medical Sciences courses to be offered twice this year, features management of acute stroke patients, acute head injuries, seizure problems and other neurological and neurosurgical disorders. Participants will attend seminars, rounds and discussion groups, with special emphasis on day-to-day care of patients in the Mississippi Regional Medical Program demonstration stroke unit.

December 7-11, 1970

NEPHROLOGY INTENSIVE COURSE

University Medical Center, Jackson

December 7, 8, 9, 10, 11, 1970, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine, with the support of the Mississippi Regional Medical Program

Coordinator:

John D. Bower, M.D., assistant professor of medicine and director of the artificial kidney unit, The University of Mississippi School of Medicine

Course content will emphasize the reversible and treatable forms of kidney disease, with an in-depth study of the management of acute kidney failure and control of reversible features of chronic kidney disease. Registrants will take up management of pyelonephritis, fluid and electrolyte problems, acid base balance and hemodialysis.

Registration in all intensive courses is limited to five of 40 family physicians enrolled in the Mississippi Postgraduate Institute in the Medical Sciences, a Mississippi Regional Medical Program-supported project designed by the University of Mississippi School of Medicine and the Mississippi State Medical Association.

CIRCUIT COURSES

NORTHERN CIRCUIT

Greenville—October 29—Session 2; November 5—Session 3, Greenville General Hospital, 8 p.m.

Tupelo—November 17—Session 3, North Mississippi Medical Center, 7 p.m.

Session 2—Back Pain

Neurological Approach, Dr. Armin Haerer
Neurosurgical Approach, Dr. Robert R. Smith

Session 3—Modern Management of Rh Sensitization

In the Mother, Dr. Calvin Hull
In the Infant, Dr. Alfred Brann

SOUTHEAST CIRCUIT

Pascagoula—November 10—Session 1, Singing River Hospital, 6:30 p.m.

Session 1—Current Trends in the Management of Septic Shock, Dr. William A. Neely

Management of Breast Lumps, Dr. James Spell

EASTERN CIRCUIT

Columbus—November 24—Session 1, The Downtowner Motor Inn, 6:30 p.m.

Session 1—Surgical Aspects of Urinary Tract Trauma, Dr. W. Lamar Weems Topic to be announced, Dr. Tom Kilgore

FUTURE CALENDAR

October 29, 1970
CIRCUIT COURSE, GREENVILLE

November 2-6
RADIOLOGY INTENSIVE COURSE
ELECTROCARDIOGRAPHY INTENSIVE COURSE

November 4
THROMBOEMBOLIC DISEASE: THE pCLOT
THAT KILLS

November 5
CIRCUIT COURSE, GREENVILLE

November 9-13
GASTROENTEROLOGY INTENSIVE COURSE
PEDIATRICS INTENSIVE COURSE

November 10
CIRCUIT COURSE, PASCAGOULA

November 17
CIRCUIT COURSE, TUPELO

November 24
CIRCUIT COURSE, COLUMBUS

November 30-December 4
NEUROLOGICAL DISEASES AND STROKE IN-
TENSIVE COURSE
CARDIOLOGY INTENSIVE COURSE

December 7-11
NEPHROLOGY INTENSIVE COURSE

December 11
INFECTIONS IN OBSTETRICS AND GYNECOL-
OGY SEMINAR

January 6, 1971
CIRCUIT COURSE, BILOXI

January 7
CIRCUIT COURSE, HATTIESBURG

January 11-15
NEUROLOGICAL DISEASES AND STROKE IN-
TENSIVE COURSE

January 12
CIRCUIT COURSE, McCOMB

January 18-22
CANCER CHEMOTHERAPY INTENSIVE COURSE

February 1-5
ELECTROCARDIOGRAPHY INTENSIVE COURSE

February 3
CIRCUIT COURSE, GULFPORT

February 4
CIRCUIT COURSE, HATTIESBURG

February 16
CIRCUIT COURSE, NATCHEZ

NOVEMBER 1970

February 18
NEUROLOGY SEMINAR

February 23
CIRCUIT COURSE, COLUMBUS

March 1-5
GASTROENTEROLOGY INTENSIVE COURSE

March 3
CIRCUIT COURSE, BAY ST. LOUIS

March 4
CIRCUIT COURSE, HATTIESBURG

March 5
RENAL SEMINAR

March 8-12
NEPHROLOGY INTENSIVE COURSE
CARDIOLOGY INTENSIVE COURSE

March 9
CIRCUIT COURSE, MERIDIAN

April 5-9
PEDIATRICS INTENSIVE COURSE

April 6
CIRCUIT COURSE, MERIDIAN

April 13
CIRCUIT COURSE, McCOMB

April 19-23
RADIOLOGY INTENSIVE COURSE

April 20
CIRCUIT COURSE, NATCHEZ

April 27
CIRCUIT COURSE, COLUMBUS

May 3-6
MISSISSIPPI STATE MEDICAL ASSOCIATION

May 11
CIRCUIT COURSE, MERIDIAN



DEMPSEY T. AMACKER of Natchez announces the opening of the Downtown Clinic at 304 Franklin Street for the practice of family medicine and surgery.

W. J. AYCOCK of Calhoun City was recently honored with a special program and luncheon by the Calhoun City Rotary Club for his many years of service to the community.

PERSONALS / Continued

TOM E. BENEFIELD, JR., and J. R. HOUSE, JR., of Gulfport announce the association of D. L. CLIPPINGER in the general practice of medicine and surgery.

THERESA L. R. BUCKLEY of Biloxi is serving as chairman of the professional division of the United Fund Campaign in the Biloxi area.

E. L. CARRUTH and J. E. MANN of Jackson announce the removal of their offices for family practice to 5429 Suncrest Drive.

R. J. FIELD, JR., of Centreville was a guest speaker at a seminar on Areawide Emergency Medical Systems in Tulsa, Okla.

E. FLECHAS of Natchez announces the removal of his office of 172 Sgt. Prentiss Drive.

BEN HILBUN of Tupelo received a trophy as winner of the dove hunt given for North Mississippi Medical Center staff and friends by E. L. King, hospital administrator.

Seven physicians were on the program of the Oct. 6 four-day clinical nursing conference sponsored by the Mississippi Nurses' Association at Jackson. Participating were: W. L. JACQUITH, ALTON B. COBB, STEVEN MOORE, WILLIAM F. KLEISCH, ALFRED W. BRANN, JR., DONALD M. SHERLINE, and DANIEL H. DRAUGHN, all of Jackson.

JOSEPH KULJIS of Biloxi has been awarded a special certificate from President Richard M. Nixon in appreciation for serving as a medical advisor on Selective Service System Local Board 25 since 1948.

ROBERT L. MCKINLEY of Tupelo, Medical Director of the Regional Mental Health Complex of the North Mississippi Medical Center, participated in a recent program on various phases of mental health for the Lee County Bar Association.

VERONICA M. PENNINGTON of Jackson has been honored by Central Medical Society for her 50 years in the American and Mississippi State Medical Associations. She received a plaque, 50 year pin and lifetime membership in AMA and MSMA.

DONALD R. RAYNER of Long Beach has been named Chief of the Medical Staff at Memorial Hospital at Gulfport.

LOUIS A. RUBENSTEIN has opened his office for the general practice of medicine in Spring Plaza Shopping Center in Ocean Springs.

STANLEY C. RUSSELL of Jackson has been appointed chief, psychiatric service, VA Center, Jackson.

EDWARD G. SCOTT, JR., of Meridian has been appointed to the Mississippi Heart Association Cardiopulmonary Resuscitation Committee. Other members of the committee, all CPR instructors, are KARL HATTEN of Vicksburg; WALTER ROSE of Indianola; T. E. Ross, III, of Hattiesburg; M. A. TAQINO of Biloxi; and HENRY TYLER of Jackson.

JAMES T. THOMPSON of Moss Point was recently recognized for 31 years of Rotarian service by the Moss Point Rotary Club. Dr. Thompson served as president of the State Medical Association during 1966-67.



DEATHS

No reports of deaths in the association were reported to the JOURNAL during the month of September, 1970.



NEW MEMBERS

OWENS, LOUIS JENNINGS, Woodville. Born Centreville, Miss., Aug. 14, 1937; M.D. University of Mississippi School of Medicine, Jackson, Miss., 1969; interned, University Medical Center, Jackson, Miss., one year; elected Sept. 1, 1970 by Amite-Wilkinson Counties Medical Society.

Dr. Thiede Named Assistant Dean

Dr. Henry A. Thiede, professor of obstetrics and gynecology and chairman of the department at the University of Mississippi School of Medicine, has been named assistant dean of the medical school in addition to his other duties.

A University of Rochester graduate, Doctor Thiede holds the M.D. degree from the University of Buffalo School of Medicine and Dentistry. He received his University of Mississippi School of Medicine faculty appointment in 1967, prior to which he was associate professor of obstetrics and gynecology at the University of Rochester School of Medicine and Dentistry.



Book Reviews

Acute Renal Failure: Diagnosis and Management. By Robert C. Muehrcke, M.D. 263 pages with 126 illustrations. St. Louis: The C. V. Mosby Company, 1969. \$19.75.

The introduction to *Acute Renal Failure* by Robert C. Muehrcke acquaints the reader with mechanical, iatrogenic and disease states that induce acute anuria. More detailed treatment of these problems is taken up further in the book. In addition, he also introduces diagnostic procedures that are helpful in acute renal failure and therapeutic modalities that may be useful in the treatment of acute renal failure.

The section on intrinsic renal disease goes into a brief historical review of terminology. The perplexing state of classification of interstitial nephritis is not significantly changed by the author's discourse. The major causes of acute renal failure are discussed and are supplemented with case histories and photomicrographs of renal lesions.

The author's most important section deals with the etiology of acute renal failure and puts physicians on guard. The incidence of severe iatrogenic renal disease is increasing with the increased use of both old and new drugs. A listing of the drugs causing acute renal failure is presented and a diagram of a nephron showing sites of damage is given.

The author points out that complicating medical problems alter the method of treatment of acute renal failure. Since infection is the most common complication, a useful listing of the excretion rate of antibiotics is given.

The portion on treatment of acute renal failure is rather superficial but a more lengthy approach would not be in keeping with the aim of this book.

I have some minor disagreements with the author, such as his recommendation to treat acute papillary necrosis with tetracycline and chloromycetin and his sentence suggesting that all hyponatremic individuals with renal disease should be corrected with hypertonic saline.

This book covers the problems of acute renal failure in a comprehensive manner. The author has created a clinical monograph that will be useful to the practice of physicians and residents in most specialties. The references used have included recent publications as well as the pertinent original publications. The reader is not bored with the presentation of basic concepts which are available and expected in more voluminous texts and the cost is not out of keeping with publications of similar scope.

KARL W. HATTEN, M.D.

Current Diagnosis & Treatment. By Henry Brainerd, M.D.; Marcus A. Krupp, M.D.; Milton J. Chatton, M.D.; and Sheldon Margen, M.D. 884 pages. Los Altos, Calif.: Lange Medical Publications, 1970. \$11.00

Medical Students are adept at finding sources of material presented in a concise, usable manner and this book has found widespread use among them. As is stated in the Preface, it is not intended to be used as a textbook of medicine, but as a handy desk reference on the most widely used and accepted techniques available for diagnosis and treatment. However, there are many subjects covered which are so new that they do not appear in the major textbooks of medicine. For instance, Fredrickson's classification of hyperlipidemias, along with diagnostic points and treatment, is outlined in chart form. There are many helpful graphs and charts scattered throughout the book which aid in differential diagnosis.

The subjects are not indexed as thoroughly as is desirable. The fat disorders are listed under hyperlipidemias, not under cholesterol or triglyceride. Multiple myeloma is discussed but not indexed for this main discussion.

For the busy practitioner this would be a useful desk reference. In addition, if more information is needed on a particular subject, current references from the literature are given following each discussion.

A. ROBERT DILL, M.D.

Georgia Internists Hold Meeting

The American College of Physicians (ACP) will hold an annual scientific meeting for specialists in internal medicine and related specialties Nov. 14 in Atlanta.

The Georgia state meeting is one of 37 state and area scientific-educational meetings the ACP is planning for the 1970-71 academic year. Held throughout the United States and Canada, the meetings help the College's 16,000 members keep informed of developments in the basic sciences and in clinical medicine that affect their practices. The College has been sponsoring these meetings annually since 1930.

The Georgia meeting is being planned under the direction of Dr. Tully T. Blalock, Atlanta, ACP Governor for Georgia and assistant professor of medicine at Emory University School of Medicine.

Alabama Scientist Studies Sleep

Insomnia, sleepwalking, nightmares, they're just three of the "sleep" problems most people would like to banish, or at least control.

Scientists at the University of Alabama in Birmingham are setting out to do something about these nuisances. Their work could bring cures for some types of mental illness and control of such sleep-related conditions as fatigue, alertness, and general physical and mental well being.

A scientist who is conducting extensive research into sleep, Dr. G. Vernon Pegram, Jr., has joined a new UAB brain research program. Dr. Pegram, most recently chief of the Bio Effects Division at Holloman Air Force Base, New Mexico, is executive secretary to the international sleep research organization, the Association for the Psychophysiological Study of Sleep. His new appointment is in experimental psychiatry at the UAB School of Medicine, and he will be working in the UAB Neurosciences Program.

"Insomnia and mental illness are closely related," said Dr. Pegram, who explained that there is a physiological need in each man for a certain amount of sleep. When sleep patterns are disturbed, an individual's whole outlook is altered. He may be affected both physically and mentally.

In addition, man's physiological needs are not just for *sleep*, but for specific amounts of specific types, or stages, of sleep. It is important, says the scientist, for each sleep stage to remain constant. Dr. Pegram's research has dealt largely with the field of sleep-staging.

Because rhesus monkeys have sleep stages similar to those of man, and because the brain transmitters which produce sleep are similar in both man and rhesus, Dr. Pegram has worked extensively with the primates in his search for answers to the riddle of sleep, "one of man's basic drives."

Through computer technology, Dr. Pegram and other scientists have learned to utilize the "sleep prints" of both monkeys and people. The prints, which represent electrical activity in the brain during a full night's sleep, are analyzed by the computers, allowing scientists to accomplish in minutes what once took them many hours of skilled interpretation.

What are the goals of sleep researchers? Dr. Pegram explains that this basic need, if understood and controlled, may enable man to increase or decrease at will the amount of sleep he has each night, sleep better when he does go to bed, stay more alert and active during his waking hours, stay mentally healthy throughout his life, and do away with such annoyances as sleepwalking, insomnia, fitful sleep, and nightmares.

Through research into the nature of sleep patterns, more sophisticated forms of therapy may be discovered for treatment of drug abusers.

Even good news for the seasoned traveler may come from the research of Dr. Pegram and his associates. When flying from time zone to time zone, therefore "losing" or "gaining" time which disturbs the ordinary cycles of sleep and wakefulness, it may take days for a traveler to "get back to normal." When sleep can be controlled, the problem may never arise again. Drugs which allow a person to "catch up" on the sleep he has missed may be just around the corner.

Dr. Pegram, a native of Nashville, Tenn., received his Ph.D. degree in psychology from the University of New Mexico and his B.S. degree in biology from the University of the South, Seawane, Tenn.

Prior to his Holloman AFB appointment, Dr. Pegram was head of the Neurosciences Program at Holloman Aeromed. He has served in the Department of Psychology, University of New Mexico, and the Holloman Physiology Section. He was a postdoctoral fellow of the National Science Foundation, National Research Council.



CHP Study Would Consolidate State Agencies and Abolish Board of Health

A study report recommending sweeping reorganization of state health and health-related agencies has been released by the Division of Comprehensive Health Planning. The report and recommendations relate to a study conducted for CHP by Peat, Marwick, Mitchell and Co., a national firm of certified public accountants and management consultants.

Heart of the study recommendations is consolidation of 20 health and health-related state agencies into a single Commission for Health Programs. Among agencies to be abolished as separate entities and combined under the new commission are the State Board of Health, charity hospitals, State Hospital Commission, Board of Trustees of Mental Institutions, Medicaid Commission, Cerebral Palsy Hospital School, Commission of Hospital Care, Air and Water Pollution Control Commission, and Interagency Commission on Mental Illness and Retardation.

The new commission would consist of seven members, four of whom would be appointed by the governor, two by the lieutenant governor, and one by the speaker of the House of Representatives. The commission would have a director and staff.

Also consolidated would be professional licensure for physicians, dentists, nurses, and allied professional personnel under a single multidiscipline board with a single administrative office.

The study report lists 53 state agencies with principal or secondary activities in health or health services with a combined annual appropriation of about \$78 million. The consolidation move, approved by the Comprehensive Health Planning office and transmitted to the legislature, would reduce the number of state employees involved and expenditures, the report contended.

The Departments of Public Welfare and Education, both with health functions, would be unaffected in the consolidation, as would be the

Board of Trustees of Institutions of Higher Learning under which the University Medical Center is operated.

The study report said that \$22 million is being expended annually for purchase of health services from the private sector. Of this \$17 million is in federal funds. This includes the Medicaid program for the first six months of 1970. About \$9.6 million are expended for totally federal fund projects, including the Tufts-Delta project, the County Health Improvement Program (CHIP), the UMC Regional Medical Program, the Mound Bayou Hospital, and various community action agencies.

The CHP program is guided by a 40-member advisory body of which seven key health-related agency chief are *ex officio*, non-voting members.

Physicians on the 33-member voting body are Drs. Temple Ainsworth of Jackson, Guy D. Campbell of Jackson, Verner S. Holmes of McComb, Edley H. Jones of Vicksburg, William E. Lotterhos of Jackson, Gilbert R. Mason of Biloxi, and Rhea L. Wyatt of Holly Springs.

Dr. Holmes is chairman of the advisory council as well as representative of the Board of Trustees of Institutions of Higher Learning.

The report stated that extensive changes in law by the legislature will be necessary to implement the sweeping plan, since each of the 20 agencies to be abolished are under separate laws. It is expected that legislation will be presented to the 1970 Regular Session in January.

The new agency concept has met opposition from some medical and legislative leaders. The Associated Press reported that Sen. Hayden Campbell of Jackson, chairman of the Senate Committee on Public Health, opposes the plan.

Sen. Campbell was quoted as saying that the plan "would abolish the State Board of Health which we have kept out of politics."

The Senator also said that "this plan will put

all our agencies into politics.”

Dr. William E. Lotterhos of Jackson, newly installed president of the American Academy of Family Physicians, told the JOURNAL that he opposes the recommendations and proposed abolition of state health-related agencies. Another medical leader on the advisory council voiced objections to the consolidated licensure function for professional individuals.

Association spokesmen said that the Council on Medical Service and Board of Trustees will study the report and recommendations prior to the convening of the 1971 legislative session.

Also included in the recommendations is a proposal to combine county public health departments into districts with 10 regional offices throughout the state.

The AP reported that Dr. Holmes, chairman of the advisory council, transmitted the report to the legislature stating that the body's interest was not to be critical of any program but to set up the best possible organization to manage them.

He was quoted as saying to the legislators that the consolidation could be achieved as recommended in the report or through “some alternative which you in your wisdom and counsel feel would better secure the desired goal.”

The news story said that the study cost \$80,000 and covered a five-month period.

ICS Will Meet in Las Vegas

The program for the Third Western Hemisphere Congress to be held in Las Vegas, Nov. 20-24, 1970, will feature Canadian, United States, Mexican and South American surgeons. There will also be guests from other nations presenting papers.

Mr. Frederick Fitzgerald, Orthopedist of Harley Street, London, Prof. Francois Mattei of France, Prof. Dr. D. Juzbašić from Yugoslavia, and Prof. Dr. Med habil A. K. Schmauss from East Berlin, are a few of the world wide surgeons to be presented.

Dr. Esteban D. Rocca of Lima, Peru, will succeed Dr. Ed Compere of Chicago as president of the International College of Surgeons Jan. 1, 1971. Dr. Lawrence W. Long of Jackson, Miss., will continue in the office of treasurer for two more years, having been re-elected in Paris last April.

UMC Announces Faculty Changes

A number of faculty changes at the University of Mississippi School of Medicine went into effect in October.

Dr. Thomas M. Blake has been promoted from associate professor of medicine to professor. A Vanderbilt University School of Medicine graduate, Dr. Blake joined the University of Mississippi medical school faculty in 1955.

Promotions from assistant professor to associate professor include director of pulmonary research Dr. Myra Tyler, medicine; Dr. Francis S. Morrison, medicine; and co-director of the MRMP demonstration stroke unit Dr. Robert R. Smith, neurosurgery.

Dr. Michel Hersen, new associate professor of psychiatry (psychology), holds the B.A. degree from Queens College and the M.A. from Hofstra University. He earned the Ph.D. from the State University of New York at Buffalo in 1966. Prior to his appointment, Dr. Hersen was director of internship training at Fairfield Hill Hospital in Newton, Connecticut.

Sister Mary Bernadette Ferrel of Aberdeen, S. D., Miss Suzanne Robert of Montreal, Canada, and Mrs. Minta Uzodinma of Jackson are new associates in the department of obstetrics and gynecology, in connection with the nurse-midwifery program. All are among the program's first graduates.

Two new faculty members, Dr. Robert W. Scott and Dr. Gaston R. Rodriguez, joined the University of Mississippi School of Medicine teaching staff in September.

Dr. Scott, psychiatry (psychology) assistant professor, holds the B.S. degree from the University of Arkansas and the M.S. from Oklahoma State University. He earned the Ph.D. degree in 1968 at the University of Houston, taking his internship at Oklahoma University Medical Center, where he was an instructor. Prior to his appointment, Dr. Scott was a clinical psychologist at the Miami V. A. Hospital and psychological consultant to the Dade County Public Schools, Northeast District, in Florida.

A native of Lima, Peru, Dr. Rodriguez is an instructor in medicine. He received the M.D. degree from the University Nacional de San Marcos in Lima. He interned at St. Francis Hospital in Pittsburgh, Pennsylvania, and did his residency at the University Medical Center in Jackson, where he was also a fellow and research associate.

Richman Essay Contest Announced

Announcement of the 1971 Alfred A. Richman Essay Contest was made today by the American College of Chest Physicians. The annual contest offers undergraduate medical students throughout the world the opportunity to submit in open competition manuscripts on any phase of the diagnosis and treatment of cardiovascular or pulmonary disease.

Research or review articles relating to the diagnosis or treatment of cardiovascular or pulmonary disease are acceptable. In accord with the rules of the contest, preceptors are at liberty to assist

the student in selecting a suitable subject and guide him in the preparation of his essay.

Three cash prizes totaling \$1,000 are awarded annually. The first prize will be \$500; second prize, \$300 and third prize, \$200. Each winner will also receive a certificate of merit. A trophy inscribed with the name of the winner and the name of his school will be presented to the winner's school.

The winning essayist will be announced by the judges in June, and subsequently, awards will be presented at the Annual Meeting of the College in October.

The official application form may be secured by writing Essay Contest, American College of Chest Physicians, 112 East Chestnut Street, Chicago, Ill. 60611, USA.

Dr. Carter Honored at Open House



University of Mississippi Medical Center faculty, staff, other personnel and students attended a reception for Dr. and Mrs. Robert E. Carter, left, on Sept. 28, 1970. Dr. Carter resigned his post as Medical Center director and medical school dean, effective Oct. 1, to accept an appointment as Dean of the

Basic Sciences for Medical Education at the University of Minnesota new Duluth campus. Dr. and Mrs. Robert E. Blount, right, talk with the Carters at the open house. Dr. Blount, former assistant director and assistant dean, is currently acting director and acting dean at the Medical Center.

Dr. Brumby Day Held in Lexington

Dr. Paul B. Brumby of Lexington, president of the Mississippi State Medical Association, was honored with a reception and special ceremony at the Holmes County Country Club in late September.

More than 400 friends, civic leaders, and associates were present to pay tribute to the physician who has practiced medicine in Holmes County for 40 years. The Lexington Lions, Rotary, and Business and Professional Women clubs were in charge of arrangements.

Guests were greeted by Mr. C. M. McDaniel and presented to the receiving line composed of Dr. and Mrs. Brumby and their daughter and son-in-law, Mr. and Mrs. Donald Holder of New Orleans.

Mr. Marvin McLellan, master of ceremonies, presented Dr. Brumby with a plaque inscribed with the following words: "Presented to Paul B. Brumby, M.D. in appreciation for more than forty years of unselfish, devoted and humane medical service to our community," and signed "Friends."

The Board of Trustees of the Holmes County



Dr. J. Dan Mitchell of Jackson, right, MSMA vice president, presents a letter of tribute from the association to Dr. Brumby, center, as Mrs. Brumby looks on.

Community Hospital passed a resolution expressing "the deep appreciation of that board and the community at large for his years of professional and personal service."

Mr. C. B. Read, Administrator of Holmes County Community Hospital, read a letter from the hospital Board of Trustees and employees. The letter stated that in lieu of a gift, they had commissioned a portrait of Dr. Brumby to be painted and placed in the hospital.

Dr. J. Dan Mitchell of Jackson, vice president of MSMA, read a letter of tribute from the medical association.

Mr. Alton Parker, chairman of Selective Service Board No. 29, presented a special certificate of appreciation for loyal and faithful service to the nation and Selective Service System as medical advisor to the registrants since World War II.

Also representing the medical association were Dr. A. E. Brown, president-elect and Mrs. Brown of Columbus.

MHA Announces Research Program

The Mississippi Heart Association has announced its 1971-72 research grants and fellowships program.

The research program was instituted to aid in the development of cardiovascular research, and of future leaders in the broad field of cardiovascular function and disease. The research funds are used to support individual investigators and research projects.

Each year the association makes the following research awards: (1) to the University Medical Center in support of the Love Memorial Chair of Cardiovascular Research—no less than \$20,000; (2) to departments in Mississippi institutions of higher learning engaged in cardiovascular research to establish research fellowships. The stipend is \$6,000 plus a dependency allowance of \$500. Departments must apply each year for continuation of fellowships; (3) to individual investigators, grants-in-aid from \$2,000 to \$4,000 to encourage support of basic and clinical research in cardiovascular function or disease, or in related fundamental problems. Grants are made for one year, and the project must have the approval of the department chairman.

Application forms may be requested at any time from the MHA, Box 5002, Jackson, Miss., telephone 362-6945. Deadline for receipt of fellowship and grant-in-aid applications is Nov. 23, 1970.

Awards will be announced in May, 1971, for the year beginning July 1, 1971. The doctoral degree is required for all categories.

Dr. Lotterhos Discusses New AAGP Program



Dr. William E. Lotterhos (left), Jackson, family physician and president of the American Academy of General Practice, discusses a new pilot project in medical communications with a physician for HEW and the Executive Director of the Kansas City-based Academy. Dr. Jerri Barden (center), a representative of the Health Care Technology Division of the Health Services and Mental Health Administration of HEW, sought the 31,000-member Academy's assistance in linking doctors' offices with

a federal computer center in Valley Forge, Pa., through use of a touch-tone system combined with the telephone system. Mac F. Cahal (right), chief executive officer of the Academy, joined Dr. Lotterhos in working out a project whereby members of the Academy will take part in the project providing them instant access to drug incompatibility data. Dr. Lotterhos, who became president of the Academy September 30, serves also as chairman of the organization's Liaison Committee on Technology.

AAOS Publishes Book on Sports Medicine

"A Bibliography of Sports Medicine" has been published by the American Academy of Orthopaedic Surgeons, Chicago.

Compiled by the Academy's Committee on Sports Medicine, the 96-page volume is identified as an introduction to the interdisciplinary literature for physicians and others handling athletes and athletic programs.

More than 1,300 article and publication refer-

ences are cross-indexed from allergy to wrestling. The 175 index subjects include aquatics, biomechanics, conditioning, drugs, equipment, the knee, pain, research methods, scuba and skin diving, sleep, warm-up, and weight.

The book was edited by Dr. Jack C. Hughston, Columbus, Committee Chairman, and Kenneth S. Clarke, Ph.D., former Academy Coordinator of Continuing Education. It is available at \$2.00 per copy with quantity discounts. Write Publications Committee, American Academy of Orthopaedic Surgeons, 430 North Michigan Avenue, Chicago, Ill. 60611.

Alabama Has 3 Year M.D. Degree Program

Starting next July, Alabama's medical students can obtain their M.D. degrees in three years instead of the traditional four.

Dr. Clifton K. Meador, dean of the School of Medicine, University of Alabama in Birmingham, made the announcement.

The School of Medicine is one of several U. S. medical schools undergoing extensive curriculum changes in an effort to provide a more relevant education for the modern medical student.

"Advantages of the curriculum changes are numerous," said Dr. T. Albert Farmer, director of the school's Office of Undergraduate Medical Education.

"Now the medical student can decide a year earlier the directions that his career will take," he said.

One great advantage in the new curriculum will be the year-round use of all medical teaching facilities, instead of the virtual closing down of the school during the summer.

"The new program has tremendous recruiting appeal for Alabama youth. Our main goal is to train Alabamians for practice in our state. Once he knows that he can get his medical education in three years—a shorter period of time than the vast majority of other medical schools—the aspiring medical student will be encouraged to train here," said Dr. Farmer.

In order to get the most out of educational facilities at the University of Alabama School of Medicine, freshmen will attend the first five quarters of school without a break.

"In a nation needing more and better health manpower, we cannot afford to lose valuable summer months during which we could be training future physicians," Dr. Farmer said.

The remaining seven quarters of medical education will be tailored for the individual student, leaving room for some to hold jobs, others to take vacations, still others to graduate in three and one-half or four years if necessary.

"We will be oriented toward having a student learn what he actually needs to know or be able to do," said Dr. Farmer. "We want our future graduate to be more of a problem-solver, able to identify patients' problems and solve them as quickly and expertly as possible.

"The crisis-oriented present system must be supplemented by emphasis on comprehensive

care with better efforts at preventive medicine."

The new curriculum will introduce clinical experience to the new medical student virtually from the first day of training.

A major reduction in formal classroom time will allow the student to assume more responsibility for his own personal learning, thereby establishing a pattern for a lifetime of learning.

"During his education, the student will have experiences with a full range of situations similar to those he will encounter in actual practice.

"The curriculum should provide an opportunity for the student to recognize the broad social and economic responsibilities of the medical profession as a whole," Dr. Farmer concluded.

Dr. Blount Named UMC Acting Director

Dr. Robert E. Blount, assistant director of the University of Mississippi Medical Center and assistant dean of the School of Medicine, has been appointed acting director and acting dean by the Board of Trustees, Institutions of Higher Learning.

Former UMC director and School of Medicine dean Dr. Robert E. Carter resigned his post to

accept an appointment as Dean of the Basic Sciences Program for Medical Education at the University of Minnesota new Duluth campus.

Dr. Blount, who is also medicine professor and preventive medicine associate professor, came to the Mississippi institution in 1968 from Fitzsimons General Hospital in Denver, Colo.,

where he was Commanding General.

During his U. S. Army career, Dr. Blount held assignments across the United States, in the Far East and in Europe. Prior to his Denver post, he served as Commanding General of the U. S. Army Medical Research and Development Command in the Office of the Surgeon General.

The new acting dean and acting director, a Millsaps College graduate, earned the M.D. degree at Tulane University School of Medicine and interned at the U. S. Marine Hospital in New Orleans. He entered active duty in 1933.



Dr. Blount

Medical Center Hosts Attorney General

to the Department of Otolaryngology, University of Illinois at the Medical Center, Postoffice Box 6998, Chicago, Illinois 60680.

Ole Miss Publishes Marihuana Index

The world's scientific literature on "pot" has been indexed in a 200-page bibliography published this week by the University of Mississippi.

The "Annotated Bibliography of Marijuana 1964-1969" is being issued by the School of Pharmacy's Research Institute of Pharmaceutical Sciences under a contract with the National Institute of Mental Health. The publication was edited by Dr. Coy W. Waller, director of the Research Institute, and staff members Dr. Hugh D. Bryan, Jacqueline J. Denny and Lois P. Schiff.

The index to international scientific literature includes information on marihuana found in journals in the free world as well as in publications behind the iron curtain. The bibliography includes references to some 800 books, magazines, journals, and articles relating to Cannabis Sativa L., the technical name for "pot."

Dr. Waller said the bibliography was issued because of a great amount of scientific literature published on marihuana in recent years.

"The last such publication was published in 1965 by the United Nations Commission on Narcotic Drugs and included 1,860 references. Considerable progress has been made in the last six years on the chemistry of the constituents in marihuana and an updating of the bibliography of scientific literature is timely," Dr. Waller said.

"The cannabis literature during the years 1964-69 contains many reports on the chemistry of the plant constituents, synthesis of the tetrahydrocannabinols and cannabinoids—the active ingredients—and the use of new analytical tools to identify and confirm the major components of cannabis."

Dr. Waller said advances in the chemical knowledge of marihuana appear to precede a new wave of study of the biological aspects of the drug. "It is predicted that during the next five years, major contributions to the knowledge of the pharmacology, toxicology, teratology and medicinal use of cannabinoid will be published," he said.

Dr. Waller, consultant to the National Institute of Mental Health on its national marihuana research program, said the bibliography would be made available to scientists.



A. F. Sumner, center, Mississippi Attorney General, spoke to faculty and students on "Mississippi and Minnesota" at the year's first Student Assembly. This lecture series, now in its second year, features monthly speakers from various fields. School of Medicine junior Bill Tatum of Meridian, left, chairman of the Student Assembly programs, and senior Donald Blackwood of Drew, right, student body president, greet the visiting state official.

Illinois Plans Postgraduate Course

The Department of Otolaryngology of the Eye and Ear Infirmary of the University of Illinois Hospital and the Abraham Lincoln School of Medicine of the College of Medicine, University of Illinois at the Medical Center, will conduct a postgraduate course in laryngology and bronchoesophagology March 15-26, 1971.

This course is limited to 15 physicians and will be under the direction of Dr. Paul H. Holinger. It will be held largely at the Eye and Ear Infirmary, 1855 West Taylor Street, Chicago, and will include visits to a number of other Chicago hospitals.

Instruction will be provided by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested registrants will please write directly

Chicago Society Sets Two PG Courses

The Chicago Medical Society will sponsor two postgraduate courses in November, 1970. A course in internal medicine will be held Nov. 9-13, and a course in obstetrics and gynecology will be featured Nov. 16-20.

The courses will be held in the Knickerbocker Hotel, 163 East Walton, Chicago.

Registration is limited. The registration fee for each course is \$150.00 which includes luncheon tickets, refreshments and a booklet summarizing each lecture. A limited number of resident physicians will be accommodated at a reduced fee.

Dr. Peter J. Talson is chairman of the internal medical course, and Dr. Charles P. McCartney is chairman of the course on obstetrics and gynecology.

The program is acceptable for 32½ elective hours by the American Academy of General Practice.

For further information and applications, write the Chicago Medical Society, 310 S. Michigan Avenue, Chicago, Ill. 60604.

APA Salutes SK&F Remotivation Project

The American Psychiatric Association has presented a special award to Smith Kline & French Laboratories for its involvement and contributions to the "Remotivation" project, a highly successful therapeutic program used in mental hospitals for the past 14 years.

Mr. Charles L. Bolling, a vice president in SK&F's Pharmaceutical Division, accepted the award from Dr. Robert S. Garber, APA President, at the opening session of the APA's 22nd annual Institute on Hospital and Community Psychiatry recently held at the Sheraton Hotel.

Dr. Garber has been associated with the "Remotivation" program for many years.

Remotivation is a therapeutic technique used by the psychiatric aide with his own patients, but under the supervision of a professional nurse. It augments other therapy—not replaces it.

The program consists of a series of patient meetings held once or twice a week under the leadership of the aide who initiates a discussion that is purely objective in nature. The sessions give even the most regressed patient the oppor-

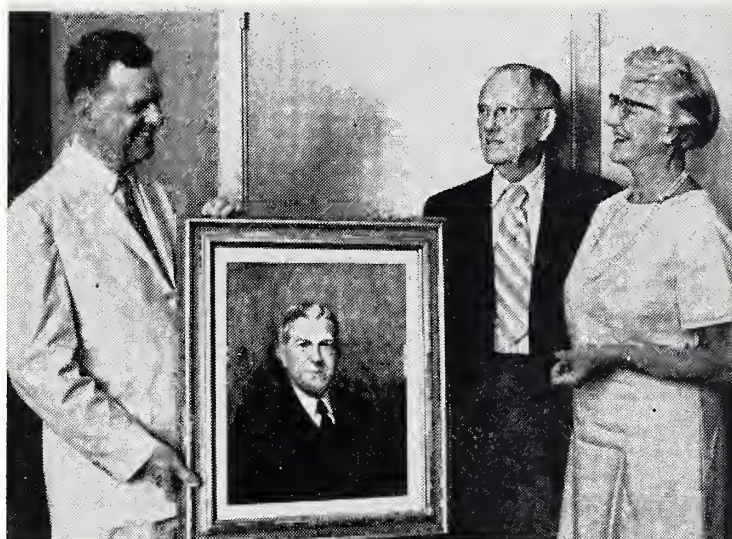
tunity of enjoying something with other people.

Remotivation originated at the Philadelphia State Hospital in 1956. Increased interest led to the formation of the Remotivation Advisory Committee of the APA Mental Hospital Service. The committee worked with SK&F's Mental Health Education Unit in establishing programs throughout the country.

From 1956 to 1960, SK&F, working with the APA, planned, coordinated and paid for classes, seminars and demonstrations that taught the technique to thousands of nurses and aides. SK&F continued its financial support after the APA assumed full administrative control of the program in 1960.

The program has been recently decentralized with 17 hospitals around the country designated as regional training centers by the APA. It is self-sustaining and requires no additional support from SK&F, the Philadelphia, Pa., manufacturer of prescription medicines and other health-related products.

Dr. Leathers' Portrait Donated to UMC

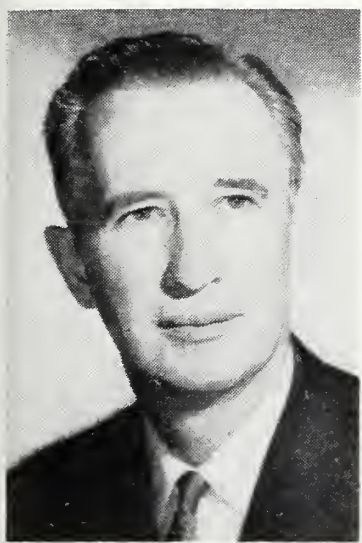


The University of Mississippi Medical Center has received a portrait of the late Dr. Waller S. Leathers, first dean of the University of Mississippi School of Medicine who later served with distinction as dean of the Vanderbilt University medical school. Dr. and Mrs. James E. Ridgeway of Tampa, Fla., at right, made the presentation. Mrs. Ridgeway is the artist. Her husband, formerly of Vanderbilt Clinic, College of Physicians and Surgeons, Columbia University, was a student at the Ole Miss two-year medical school on the Oxford campus when Dr. Leathers was dean. Dr. David B. Wilson, left, University Medical Center assistant director for health planning, accepts the painting on behalf of the University.

Family Doctor Group Takes New Name

The nation's second largest medical group has voted to change its name of 23 years. The American Academy of General Practice, national association of family physicians, now will become known as the American Academy of Family Physicians.

The action, which will take a year to develop fully, was taken by the Academy's Congress of



Dr. Lotterhos

Delegates in the final session of the group's annual meeting at the Fairmont Hotel. It immediately preceded election of Dr. J. Jerome Wildgen, Kalispell, Mont., as president-elect. Dr. Wildgen will become president a year from now at the organization's meeting in Miami Beach.

Dr. William E. Lotterhos, Jackson, Miss., became president of

the group in special inaugural ceremonies.

According to Mac F. Cahal, executive director, the change of the name was an important step in the continuing move to revitalize the nation's primary health care forces.

"This truly is a significant thing because it shows that doctors everywhere, including our members, are beginning to be comfortable with the concept of family practice, the new primary-care specialty that is obviously beginning to take hold," Cahal said. "We've tried to do this a number of times before but only now, when the specialty has become a reality and the first examinations given, has this become possible."

Cahal said the new name more accurately reflects what the organization represents. He added, however, that it will not become official until the next meeting of the Congress (normally, the fall of 1971) because it requires a change in the constitution and 90 days notice to delegates. He explained that the organization's Board of Directors had been empowered by the Congress of Delegates to "utilize the new name in the interim as it sees fit," though, so that the organization could proceed to use the new name with due speed.

In addition to Dr. Wildgen, these other officers

and directors were named:

Dr. Norman Coulter, Orlando, Fla., vice president, and Drs. Robert E. Heerens, Rockford, Ill.; Herbert A. Holden, San Leandro, Calif., and Thomas L. Lucas, Alexandria, Va. The directors will serve 3-year terms.

Drs. James G. Price, Brush, Colo., and Stanley A. Boyd, Eugene, Ore., were re-elected speaker and vice speaker respectively of the Congress of Delegates.

Wyeth Films Win Festival Awards

Two films produced by Wyeth Laboratories received awards at the 12th annual American Film Festival, held recently in New York City. The Festival, held under the auspices of the Educational Film Library Association, is the major showcase each year for over 400 films and filmstrips selected from over 1,000 entries.

In the category designated "Health for General Audience," Wyeth's film titled "*Happy Family Planning*" won the blue ribbon (first place in category). Another Wyeth film, "*Case In Point*," won the red ribbon (second place) in the "Vocational Guidance" category.

"Happy Family Planning" is an eight-minute animated, color film with music, available in either 16-mm. or 8-mm. The film, using graphic devices and no dialogue, reviews various contraceptive methods which are identified in five languages: English, French, Spanish, Arabic and Chinese. "Happy Family Planning" is designed for showing to lay groups, especially hospitalized women in the immediate postpartum period. It also can serve as a valuable educational aid in clinics, physicians' offices and at health meetings.

Prints of "Happy Family Planning" are available on loan through Wyeth representatives or the Wyeth Film Library, P. O. Box 8299, Philadelphia, Pa. 19101. Also, prints can be purchased at cost through Planned Parenthood Federation, 515 Madison Avenue, New York, N. Y. 10022.

"Case In Point" outlines precautions by which the medical assistant and her physician-employer can help protect themselves from lawsuits. Using a documentary approach, "Case In Point" depicts various professional activities of the medical assistant, and dramatizes the importance of observing fundamental safeguards in each area. The film, which is 16-mm., color, and runs 25 minutes, is available for showing to physicians and to chapters of the American Association of Medical Assistants.

UMC Offers Nurses Master Degree

The Board of Trustees, Institutions of Higher Learning, has approved the state's first master of nursing degree program, to be offered at the University of Mississippi School of Nursing this year.

Program director will be Dr. Faustena Blaisdell, who was formerly nursing professor and head of the masters program at the University of North Carolina at Chapel Hill. She holds B.S., N.Ed. and Ed.D. degrees from Teachers College, Columbia University.

The new course of study was developed in direct response to the demands of the state's nursing schools for masters-level teachers and the needs of Mississippi hospitals for equally qualified nurse supervisors, according to Dean Christine L. Oglevee.

In 1970 the Mississippi State Legislature increased the nursing school's appropriation to fund the additional curriculum load. The masters program is largely the result of efforts by the Mississippi Nurses' Association, Mississippi State Medical Association, Mississippi Hospital Association, junior colleges and other professional organizations.

Plans are underway for specialization in maternal-infant care or medical-surgical nursing.

Dr. Wong Appointed NEI Clinical Director

The appointment of Dr. Vernon G. Wong as Clinical Director of the National Eye Institute has been announced by Dr. Carl Kupfer, Institute Director. The Institute is the primary Federal organization for the support of research aimed at improved diagnosis, prevention, and treatment of visual disorders.

As Clinical Director, Dr. Wong is responsible for continuous review and supervision of NEI research involving patients and normal volunteers, including overseeing the maintenance of quality standards by physicians and nurses and the propriety of patient care.

Dr. Wong has been with NEI's Ophthalmology Branch since 1962 when it was part of what is now the National Institute of Neurological Diseases and Stroke. Beginning as a Clinical Associate, Dr. Wong advanced to the position of

Associate Ophthalmologist and Senior Investigator by 1967.

At NIH, Dr. Wong has worked in collaboration with scientists of various Institutes. Among his accomplishments has been the introduction of immunosuppressive drugs in ophthalmology, demonstrating that a number of refractory conditions of the eye, including corneal graft rejection, could be significantly improved by these agents. Dr. Wong also helped develop a simple method for diagnosing the inherited metabolic disorder cystinosis by assaying biopsies of conjunctiva, eliminating the need for the more difficult and time-consuming methods previously used.

In addition to his duties as Clinical Director, Dr. Wong will continue his current research in uveitis and conjunctival and corneal diseases.

Medical Aspects of Sports Meet Set

The 12th National Conference on the Medical Aspects of Sports, sponsored by the American Medical Association under the auspices of its Committee on the Medical Aspects of Sports, will be held in Boston at the Sheraton-Boston Hotel on Nov. 29, 1970. The Conference is held annually in conjunction with and on the first day of the Clinical Convention of the American Medical Association.

As was true of the previous 11 Conferences, the 12th will cover a wide range of subjects of interest to those serving school and college athletic programs. Included will be forums and discussion sections relating to research in sports, aquatic sports, football rules and injuries, psychology in sports, girls in sports, and emergency and public health aspects of sports.

At the Conference Luncheon, Dr. Francis D. Moore, Moseley Professor of Surgery, Harvard Medical School; Surgeon-in-Chief, Peter Bent Bingham Hospital, Boston; and eminent deep-water skipper will discuss the topic "Sailing Into Trouble." At the evening session, demonstrations on preventive and therapeutic taping, and musculo-skeletal aspects of pre-participation examination will be staged.

The Conference is open to key non-medical athletic personnel as well as interested physicians. Those who would like further information concerning the Conference should address the Committee on the Medical Aspects of Sports, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

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MISSISSIPPI MEDICAL
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Master of Public Health Programs Announced

The Division of Maternal and Child Health of the University of California School of Public Health at Berkeley announces postgraduate programs leading to the degree of Master of Public Health. These programs are for pediatricians, obstetricians, and other physicians interested in receiving training in the field of Maternal and Child Health. Fellowship support is available, including basic support for the trainee, and allowance for dependents, tuition and fees.

Program areas now available include nine-month programs in maternal and child health, health of school-age children, and maternal health and family planning. A 21-month program in care of handicapped children, perinatology, and comprehensive care is available. There are also three-year career development programs in pediatrics and obstetrics which combine public health and residency training. Fellowships are available for these programs also.

Applications are now being accepted for the group entering September 1971. For information, write to Dr. Helen M. Wallace, School of Public Health, University of California, Berkeley, Calif. 94720.

NHLI Establishes Research Centers

The National Heart and Lung Institute (NHLI) has announced its intent to establish, on a competitive basis, a limited number of specialized research centers devoted to the solution of specific problems identified by the Institute as of high priority, and in one of the following disease areas: arteriosclerosis, thrombosis, pulmonary disease, and hypertension. The objective of the program is to focus resources, facilities and manpower on particular problems and to expedite the development and application of new knowledge essential for improved diagnosis, treatment, and prevention of these diseases.

The support mechanism for the centers will be the grant-in-aid, but it will differ from other research grants both in its goal orientation and in the degree of participation by the National Heart and Lung Institute. In this sense, the award of a Center grant will connote a special relationship

between the NHLI and the grantee institution.

The deadline for receipt of applications is Jan. 1, 1971, and applicants may expect to be advised of the action on their proposals about June 1971.

The National Heart and Lung Institute is planning to hold an orientation meeting concerning the Specialized Research Center Program in Washington, D. C., on Oct. 5, 1970.

Copies of a detailed Program Announcement describing the NHLI Specialized Centers of Research, and information concerning the orientation meeting, may be obtained by writing to Dr. Jerome G. Green, Associate Director for Extramural Research and Training, National Heart and Lung Institute, Bethesda, Md. 20014.

Arteriosclerosis Research Group Meets

A new task force has met at the National Institutes of Health to plan for a 10-year research assault against arteriosclerosis—the hardening of the arteries that leads to heart attacks and other troubles. The 13-member group, led by Dr. Elliot V. Newman of the Vanderbilt University School of Medicine, was heard by Dr. Theodore Cooper, director of the National Heart and Lung Institute.

Arteriosclerosis is a factor in the great majority of the more than 1 million cardiovascular-disease deaths that occur each year in the United States. It disables hundreds of thousands more. The economic toll runs to nearly \$25 billion annually.

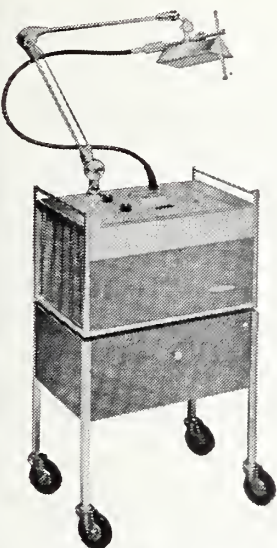
This disease is characterized by the gradual narrowing—and sometimes closure—of arteries by fatty materials and other substances in the blood. When arteriosclerosis attacks the arteries that nourish the heart muscle, it is called coronary heart disease; when blood vessels to the brain are the main target, it is called cerebrovascular disease; and when it threatens the blood supply of the arms and legs, it is called peripheral vascular disease.

In planning NHLI's attack on this urgent problem, the Task Force on Arteriosclerosis will draw on the expertise of special panels, each composed of specialists in fields such as cardiology, lipid metabolism, hormone metabolism, instrumentation, hematology, cardiovascular physiology and aging.

The final report of the task force is scheduled to be submitted to NHLI in June, 1971. It will have an important bearing on future programs by the Institute and its advisory bodies.

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Index to Advertisers

AMPAC, MPAC	625	Eli Lilly and Company	front cover, 18
Arch Laboratories	627	Medicenters of America, Inc.	12
Beckton, Dickinson and Company	612A, 612B	The Wm. S. Merrell Company	7
Breon Laboratories	8	The National Drug Company 604A, 604B, 616A, 616B	
Burroughs-Wellcome & Co.	10A	William P. Poythress and Co., Inc.	10B
Campbell Soup Company	596A	A. H. Robins Company	14, 14A, 620A, 620B
Hill Crest Hospital	6	Roche Laboratories ...	14B, 14C, 14D, 16, 17, fourth cover
Hynson, Westcott & Dunning, Inc.	3	G. D. Searle Company	596B, 596C
Kay Surgical	627	Stuart Pharmaceuticals	586, 587, 596D
Lederle Laboratories	second cover, 4, 15	Thomas Yates and Company	third cover
Leonard Wright Sanatorium	10		

IN CONCLUSION

Television critic Cleveland Amory, self-styled expert on laboratory animals and antivivisectionist extraordinary, told a House of Representatives subcommittee that dolphins cannot be anesthetized. But American Veterinary Medical Association reports that halothane works well on dolphins and marine animals in general. Amory, dour critic who pans almost everything, supports proposals to make use of lab animals much more restrictive.

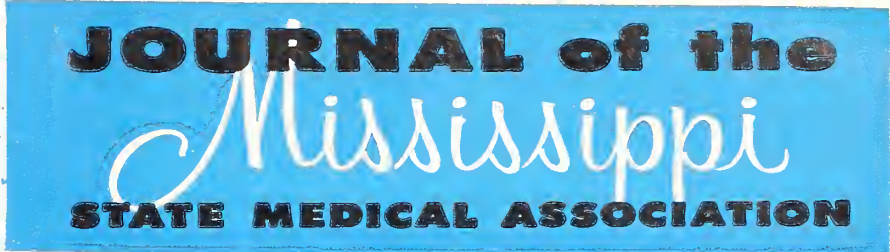
A "surgical knowledge self-assessment program" will be inaugurated by the American College of Surgeons in late 1971. Designed for those who have practiced surgery for 10 or more years, the self-assessment consists of a home examination with bibliographies accompanying each question so that examinee surgeon may use reference in answering. College says that no time limit is placed on preparing answers to be graded confidentially by a computer center.

The American Academy of Pediatrics made a strong case against lead based paint and has called on the Congress to make use of the material illegal in painting residential housing. Testimony was presented before senate committee considering H.R. 17260, the Lead-Based Paint Elimination Act of 1970. AAP witnesses shook up committee by stating that there is more brain damage in New York children from lead paint than there was from measles before immunization program.

Married to the same spouse for 150 years? A definite possibility in the future, says Dr. C. W. Hall, chief of artificial organs program of Southwest Research Institute of San Antonio. Dr. Hall foresees human life span of 175 years with ersatz transplants but wonders if it won't cause marital problems. He also concedes that century and a half lifetime will play havoc with life insurance actuarial tables and health insurance experience.

The flap over microwave oven dangers goes on with AMA asserting that as many as a third of the 60,000 now in use have excessive microwave leakage. The oven which bakes a cake in two minutes can emit heat producing waves capable of causing cataracts and deep tissue burns. General Electric, a major manufacturer of the ovens, called in the Bureau of Radiological Health to survey and test GE models which were found to be safe and without leakage.

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CONTENTS

ORIGINAL PAPERS

- Surgery of the Thymus **629** PHILIP E. BERNATZ, M.D.
- The Significance of Analytical Toxicology in the Treatment of Poisoning **636** ARTHUR S. HUME, PH.D., and JOHN D. BOWER, M.D.
- Use of Artificial Kidney in Cases of Poisoning **639** JOHN D. BOWER, M.D., and ARTHUR S. HUME, PH.D.

SPECIAL ARTICLE

- Radiologic Seminar CII
Paget's Disease **644** T. SCOTT McCAY, M.D.

EDITORIALS

- The Four Faces of National Health Insurance **647** Great Health Debate
- The Growing Role of the Joint Commission **650** Improving Care Quality
- The Doctor Has Everything, Except Time **651** Too Much for Too Few
- Hijacking and Health Insurance **651** Covered in Cuba
- Can He Do the Job? Then Hire Him! **652** Ability Counts

THIS MONTH

- The President Speaking **646** 'LPN's Fight Drug Abuse'
- Medical Organization **657** MSMA Membership Opened to UMC Upperclassmen

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AAP Makes Health Care Recommendations

The American Academy of Pediatrics has called for formation of a National Advisory Council on Children which would be responsible to the President of the United States. The Academy also called for the creation of a voluntary multidisciplinary national health service corps, and a national health insurance program to insure comprehensive coverage for all children.

These were among the recommendations made by the AAP in a special study on the delivery of health care to children, the recommendations of which were presented at the opening session of the Academy's annual meeting in San Francisco's Civic Auditorium. The study will be published in its entirety sometime in 1971.

The Academy is the Pan-American association of physicians certified in the care of infants, children and adolescents. It has more than 11,500 members in the U. S., Canada, and Latin America.

The AAP study emphasized that because of the importance of children to society, health programs for children require a higher degree of priority. To accomplish this, the AAP recommended the creation of a National Advisory Council on Children, and the establishment of an Office of Deputy Assistant Secretary for Children and Youth in the Department of Health, Education and Welfare.

The Academy indicated that the information collected in the study "amply demonstrates that the American health care delivery system for children is presently lacking adequate numbers of professional persons who are available, accessible, and acceptable to those in need of care."

The report therefore called for an expansion in the supply of physicians to eliminate these shortcomings through an increase in enrollment in medical schools; an increase in scholarships, loans and other methods of tuition financing for medical schools; expanded and well-funded residency programs for the training of primary care physicians, and adequate funding for medical schools "to permit them to maintain quality teaching of large numbers of students as well

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as to continue their needed research and service functions."

The AAP further called for the institution throughout the country of training programs for pediatric nurse associates, pediatric office assistants, and pediatric aides to improve the quantity and effectiveness of care provided to children.

The AAP urged that incentives be made available to stimulate the "better distribution of health professionals to areas of greatest need so as to provide medical care of high quality to the entire spectrum of the population."

The study also called for the creation of a voluntary multidisciplinary national health service corps to provide the opportunity for all types of health personnel to join such a corps in an effort to deliver health care services to those areas not now receiving such services.

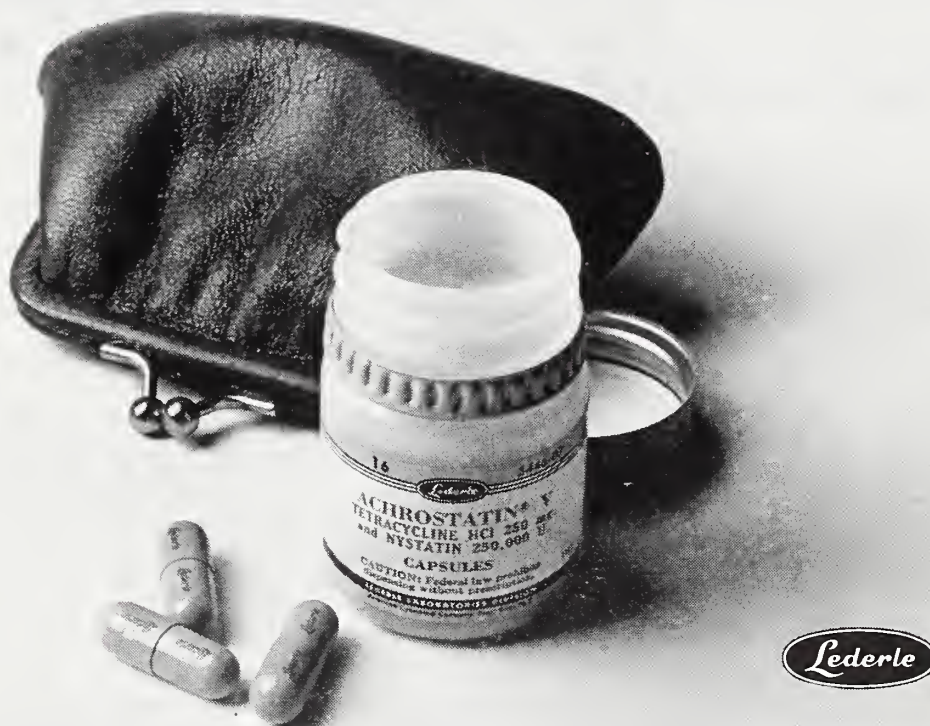
In examining the methods of financing the delivery of health care to children, the Academy report pointed out that child health care is far too expensive for millions of families, and

that voluntary health insurance is beyond the financial capabilities of many families. "With few exceptions, prepaid health insurance policies give very inadequate coverage of child health care services," the study revealed. The Academy therefore called for the development of a national health insurance program "that will insure comprehensive coverage for all children."

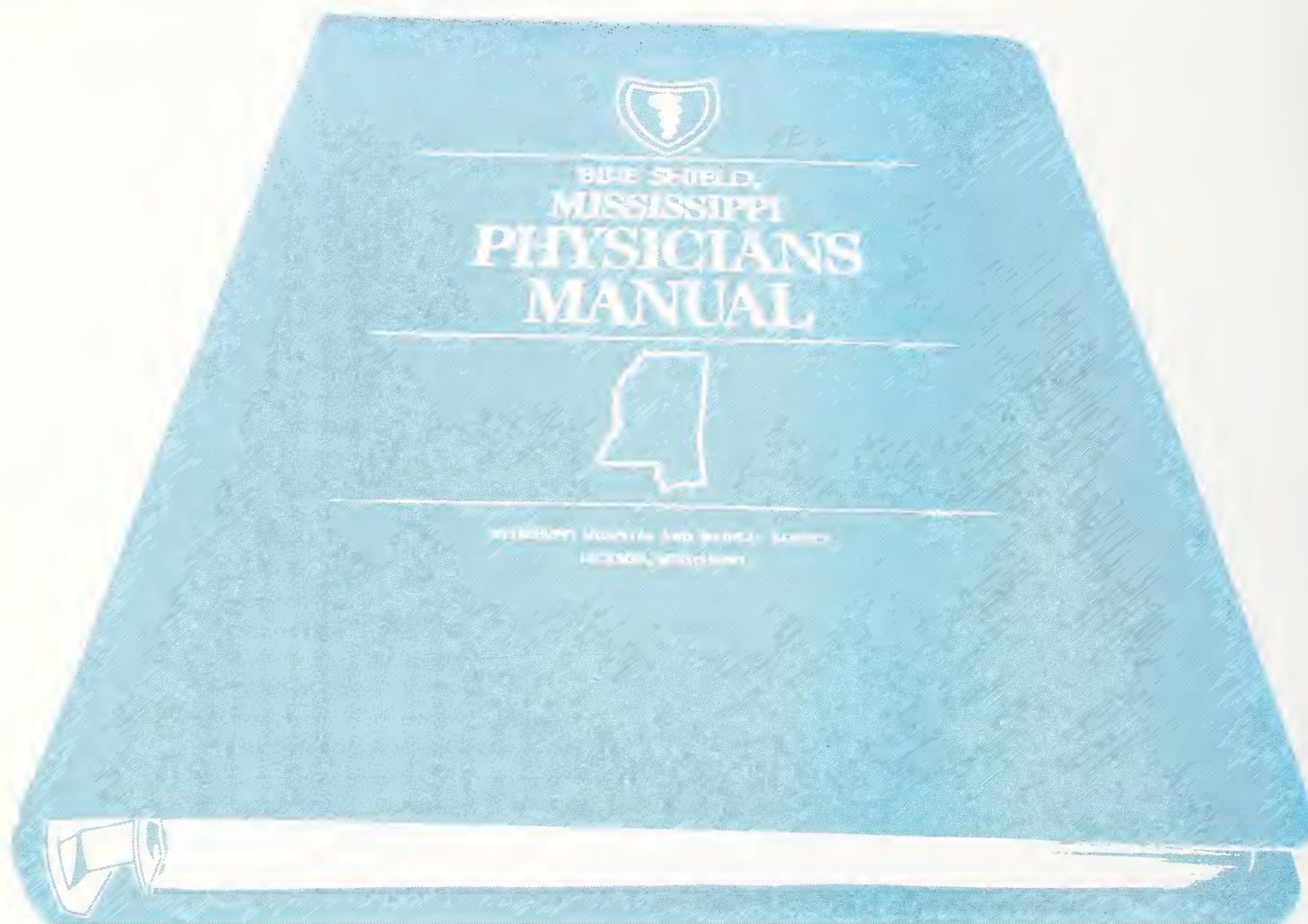
The Academy report also examined the health care of special groups of children. The AAP pointed out that large numbers of children, particularly those living in remote rural areas or in urban ghettos, can only obtain health care for acute and serious illnesses, "and even this is done with difficulty."

In other recommendations, the Academy called for the recognition that dental services are an integral part of child health care. The AAP further urged that ongoing surveys of health needs, as seen by families, be undertaken as an essential step in planning the restructuring of health care systems.

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NEWSLETTER

December 1970

Dear Doctor:

Under's raiders have hit American medicine, calling for a National Medical Board with full authority over delivery of services in U.S. The consumer crusader also called for uniform national standards of performance for physicians, standardized medical records on computers, and a system to control and limit entrance into and continuation of medical practice.

The 250-page report was prepared by two law students, a medical student, an attorney, and a former FDA M.D. Unlike other Ralph Nader projects, the medical report generated little public interest. AMA President Walter Bornemeier issued perfunctory statement in response.

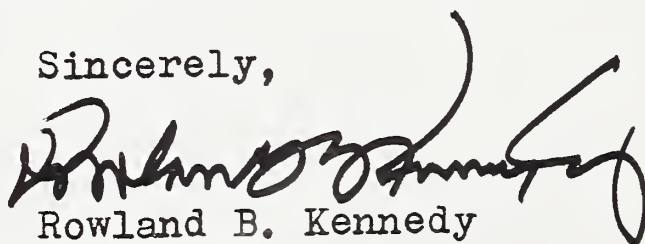
Britain's new conservative government is putting crunch on welfare state, taking away some of the National Health Service benefits. Prescription co-pay is up 60 per cent, and price of eyeglasses has been raised. Most drastic cutback is requirement for public to pay half of dental care costs against former deductible of only \$3.60 per course of treatment. Move is seen as pro-free enterprise.

The California legislature enacted Gov. Reagan's program to place all health and medical activities under state department of health. Proposition to move, however, made the governor promise to delay implementation of program two years. In Mississippi, current try is underway to abolish State Board of Health and 20 other health-related offices, creating new single state agency.

Mississippi ranks first among eight southeastern states in acceptance of Medicare assignments by physicians. Rate for state is now 14 per cent, meaning that less than 15 per cent of Mississippi D.'s bill Medicare patients directly. Average among eight states in region is 68 per cent assignments. Florida physicians have low rate, taking assignment on only 49 per cent of Medicare claims.

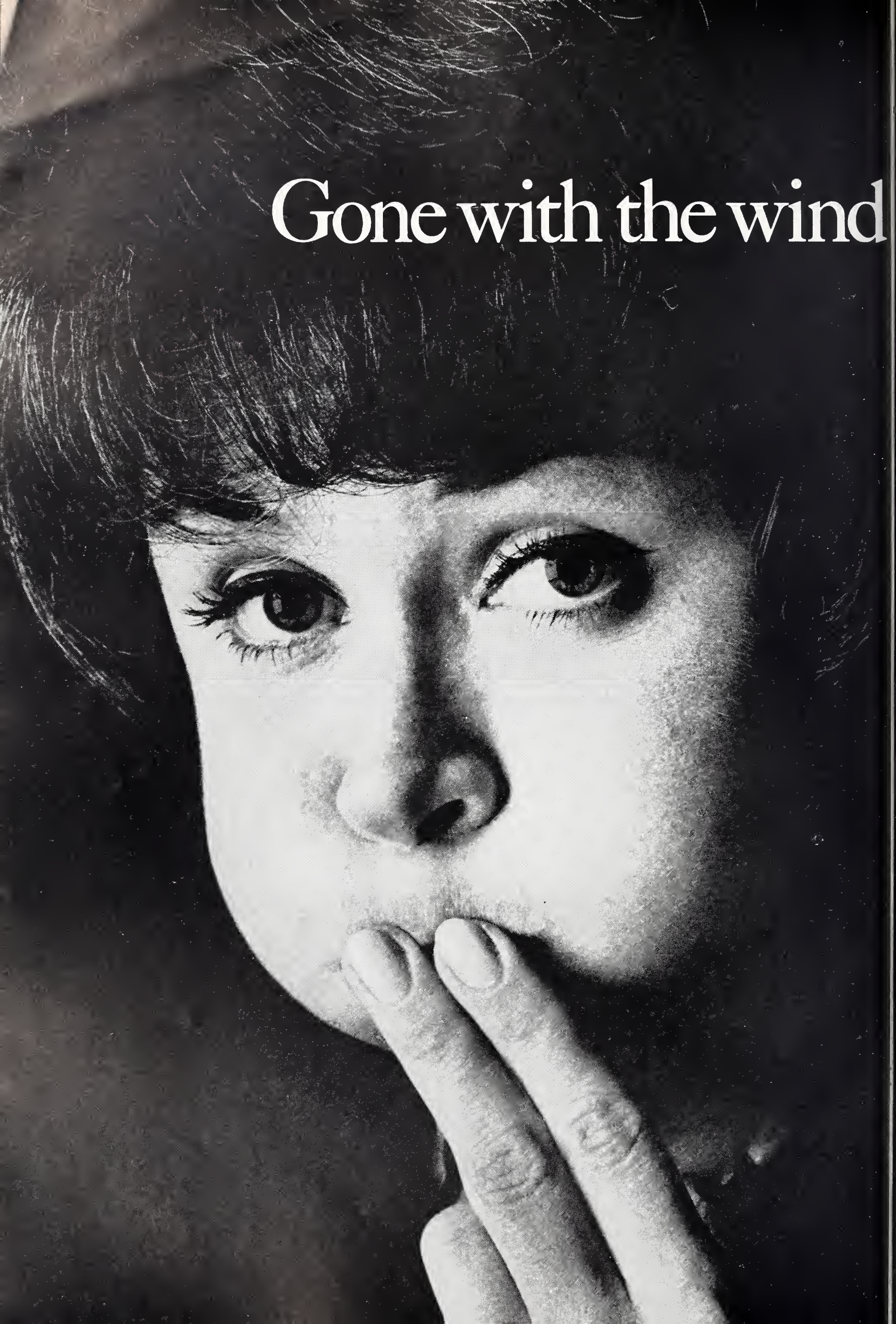
About 600 MSMA members have established current year income tax deductions by paying 1971 dues. New billing statement, sent six weeks ago, permits members to pay all dues in one check with documentation of transaction. State association reports local society dues back to home unit secretary. Members are asked to respond to billings now for improved administration and tax records.

Sincerely,



Rowland B. Kennedy
Executive Secretary

Gone with the wind



Tulane Plans Therapeutics Symposium

Dr. Arthur C. DeGraff, professor of medicine and cardiology, New York University, and Dr. William J. Grace, chief of medicine at St. Vincent's Hospital, New York City, and professor of clinical medicine, New York University, will participate in a one-and-a-half-day therapeutics session at Tulane University School of Medicine on Jan. 8-9, 1971.

Co-directors of this brief refresher symposium will be Dr. George E. Burch, chairman, department of medicine and professor of medicine, together with Dr. F. Gilbert McMahon, head of therapeutics and professor of medicine at Tulane. Several other members of the department of medicine at Tulane will also participate in this meeting.

The meeting is aimed at clinicians and is intended to be a refresher course. The management of some common cardiovascular problems, the proper use of digitalis, management of acute myocardial infarction, hypertension, arrhythmias, and hyperlipidemia will be among the problems discussed. Tuition is free.

Albany Medical College Announces Seminar Cruise

The Department of Postgraduate Medicine of Albany Medical College announces that reservations are now being accepted for the 12th Postgraduate Medical Seminar Cruise Jan. 5-20, 1971.

The trip includes a 15-day cruise from New York aboard the luxurious and distinguished ship "Gripsholm" of the Swedish American Line.

Ports of call include San Juan, Dominica, St. Vincent, Trinidad, Barbados, Martinique, and St. Thomas.

Faculty of the Albany Medical College will present a comprehensive shipboard postgraduate program, covering subjects in internal medicine, cardiology, oncology, psychiatry, surgery, and obstetrics and gynecology.

Request has been made for continuation study credit by the American Academy of General Practice.

For information write to: Dr. Girard J. Craft, Department of Postgraduate Medicine, Albany Medical College, Albany, New York 12208.

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Cryosurgery Society To Meet

The Society for Cryosurgery will hold its regular meeting March 1-6, 1971, at the Diplomat Hotel and Country Club in Hollywood, Fla. Dr. Richard Lillehei, Department of Surgery, University of Minnesota, will preside.

Section topics and leaders are: Cryosurgery for Cancer and General Surgery, Dr. William Cahan, Cancer Memorial Hospital, New York; Urology, Dr. Maurice Gonder, Millard Fillmore Hospital, Buffalo; Dermatology, Dr. Douglas Torre, Columbia-Presbyterian Hospital, New York; Gynecology, Dr. Frank Paloucek, Cancer Prevention Center, Chicago; Otolaryngology, Dr. Daniel Miller, Massachusetts Eye and Ear Infirmary, Boston.

Because of great demand for a longer session, the ophthalmology section will hold a three-day meeting March 4-6. Included among the speakers are: Dr. Claes Dohlman, Retina Foundation, Boston; Dr. Harvey Lincoff, Cornell University,

New York; Dr. Harold Scheie, University of Pennsylvania, Philadelphia; Dr. Charles Schepens, Retina Foundation and Harvard University, Boston; and Dr. Saul Sugar, Wayne State University, Detroit.

For further information, write: Mary Trueblood, Secretary, Society for Cryosurgery, 30 N. Michigan Avenue, Chicago, Ill. 60602.

New Historical Journal Published

History of Medicine, a new journal for physicians interested in medicine and the arts, has made its debut in the United Kingdom.

The journal is published quarterly and contains biographical, historical and literary features by lay and medical authorities.

Subscription price is \$6.00 annually including postage.

Dr. Harold Maxwell is editor and the journal is published at History of Medicine, Ltd., 78 Queen Victoria Street, London E.C. 4.

Announcing the Thirty-Fourth Annual Meeting of THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

Conference Headquarters—The Roosevelt Hotel—March 8, 9, 10, 11, 1971

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Colon and Rectal Surgery

Alexander A. Fisher, M.D., Woodside, L.I., N.Y.

Dermatology

Thomas P. Almy, M.D., Hanover, N.H.

Gastroenterology

Jack H. Hall, M.D., Indianapolis, Ind.

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Denis Cavanagh, M.D., St. Louis, Mo.

Gynecology

John T. Galambos, M.D., Atlanta, Ga.

Internal Medicine

Roger F. Palmer, M.D., Miami, Fla.

Internal Medicine

Nathan S. Schlezinger, M.D., Philadelphia, Pa.

Neurology

Ernest W. Page, M.D., San Francisco, Calif.

Obstetrics

Henry F. Allen, M.D., Boston, Mass.

Ophthalmology

Phillip L. Dav, M.D., San Antonio, Tex.

Orthopedic Surgery

Edley H. Jones, M.D., Vicksburg, Miss.

Otolaryngology

John A. Shively, M.D., Columbia, Mo.

Pathology

Max D. Cooper, M.D., Birmingham, Ala.

Pediatrics

William B. Seaman, M.D., New York, N.Y.

Radiology

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DATELINE

Jackson's CONTACT Jackson - A joint church-social-medical program New Teleministry is underway in the state capital, offering 24-hour counseling by telephone. Service offers trained workers manning phones around the clock to help depressed, alcoholics, drug users, or just about anybody with a problem or loneliness. Program is supported chiefly by church groups, but a number of physicians are on advisory and training committees. The new Jackson CONTACT is the eighth such project activated in U.S.

Computer Loses on Santa Rosa, Calif. - Alfred E. Fuller, 71, a Medicare Claim Medicare beneficiary, successfully sued for recovery of \$3.20 due on a Medicare claim from California Blue Shield. After meeting with rebuffs in writing the Part 1-B carrier, Fuller took his case to federal court. He proved that Blue Shield and HEW buried him in paperwork, and the trial judge ordered payment of the \$3.20 and court costs, noting sadly that "we are losing the battle to the computer."

Adolescent Suicide Chicago - Researchers at Michael Reece Medical Center report that adolescent suicide, already the fifth ranking cause of death in the 15-to-19 age group, is rising. Last year, 12 per cent of all suicide attempts were made by adolescents, and nine out of 10 attempts were made by girls. Males, the study report said, are about twice as successful in death try than girls. Report said that adolescent suicide gestures are not always taken seriously and are "cries for help."

A Procedure Code Baltimore - Medicare chief Thomas M. Tierney says SSA Support announced that Part 1-B carriers will adopt the new AMA Current Procedural Terminology, a five-digit code which describes every medical procedure. It is a further development of the California four-digit code now in almost universal use. New code will enable error-free communication between services rendered patients. Only Blue Shield opposes adoption of new CPT on objection to conversion costs and retraining.

Hospitals Lose Chicago - A survey by the Hospital Financial Computer Use Management Association reveals that a third of about 2,800 institutions with data processing units get little or no support from companies leasing computers to them. About 600 hospitals have computers, and the rest use outside data processing services. Costs range from \$1 to a high of \$8 per patient day. Most hospitals use prepackaged programs for billing, accounting, and recordskeeping.

MSBH Expands Rubella Program

Mississippi is making "major progress" against the crippling effects of Rubella, or German measles, according to Dr. Durward Blakey, director of the Division of Preventable Disease Control, State Board of Health.

Dr. Blakey and Paul M. Turner Jr., supervisor of the agency's immunization program, said the State Board of Health, through August 31, has given 165,000 doses of Rubella vaccine to children from one through 11 years of age.

Purpose of the campaign is to keep these children from passing Rubella on to their mothers and thereby causing future babies to be born mentally retarded or with eye cataracts, heart defects, liver damage, bone malformation and other defects.

Last November, Dr. Blakey announced that the State Board of Health would launch a "massive" immunization attack against Rubella as part of an all-out national assault upon the disease which caused severe birth defects in over 20,000 infants during the 1964-65 epidemic.

During the past school year, the State Board of Health, working through the various county health departments throughout the state, conducted Rubella immunization programs in 67 counties, and the agency is now beginning another series during this school year.

Because of a limited supply of vaccine last year, the State Board of Health restricted recipients of the vaccine to children five through seven in first and second grades of public and private schools and in Head Start groups and day-care centers.

In 17 of these 67 counties, children eight through 11 were included in the immunization programs where additional funds were available through Appalachia grants and through financial support at the local level.

Vaccine is now available on a wider scale, said Turner, because stocks purchased through federal assistance are sufficient to meet State Board of Health needs through the present fiscal year ending next June 30.

"We have 30 county-wide school immunization programs presently scheduled throughout the state," said Turner, "and more are being scheduled each day. We hope to reach every county in the state during the present school year.

"In the process, we expect to immunize over 225,000 more children, bringing the total immunized by the State Board of Health to close

to 400,000, not counting the thousands immunized by private physicians, who have given widespread support to this program."

Of the 30 counties scheduled thus far, said Turner, seven had no Rubella program last year, while 23 are conducting their second program, in order to provide a chance for immunization for those not immunized last year.

"There was some confusion last year," said Turner, "among parents who thought because their children had been immunized for red measles (Rubeola) they were also immunized for Rubella. This is not the case. Two separate immunizations are involved."

Turner said the Rubella vaccine given by the State Board of Health is "very safe and effective," and he said he has had no reports of any adverse reaction to the vaccine, other than minor rash or transient pain in the joints in some instances.

He said any county can make arrangements for a county-wide Rubella immunization program by getting in touch with the county health department. He said the Rubella vaccine is now being offered routinely through every county health unit in the state.

HISTORY OF MEDICINE

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ORIGINAL PAPERS

Surgery of the Thymus

PHILIP E. BERNATZ, M.D.

Rochester, Minnesota

GALEN, THE NOTED Greek physician of Rome, observed the thymus in many stages of involution in his dissections and referred to it as "an organ of mystery."¹ The accumulated experience over the centuries has not dispelled this aura, although as early as 1921 Hammar² protested the use of the adjective "enigmatic" for the thymus when he concluded that its role was antitoxic. An astounding volume of literature in the last decade relating the primary importance of the thymus in developmental immunobiology may be considered a revival of the ancient Greek concept of this gland as the "seat of the soul."

But all the contributions have not been recent. In 1614, Platter introduced the concept of status thymicolymphaticus, and we are still trying to evict it from the medical literature.¹ In 1771, the curious paradox of the involution of the thymus as peripheral lymph nodes reached full size was described in ingenious experiments by Hewson.¹ His almost modern conclusions were that small corpuscles left the thymus by lymphatic vessels to support peripheral lymphoid structures in the prepubertal period. This aura of mystery about thymic function keeps us feeling slightly queasy because most of our

practical activities have involved extirpation of the thymus. Further comfort is not afforded by Good's comparative anatomy studies that re-

At the Mayo Clinic thymectomy is offered to most young patients who have severe myasthenia gravis if control by medication has been poor. There have been remissions or marked improvement in 74 per cent of thymectomized patients, and results were especially good in cases wherein the prior duration was less than two years. Among 197 cases of thymoma, myasthenia gravis was associated in 45 per cent; and 20-year survival in that group was only 21 per cent, as compared to 41 per cent in those with thymoma alone. If the thymoma was invasive, survival was only 17 per cent at 10 years. The overall survival rates for 197 patients with thymic tumors were 65 per cent for five years, 50 per cent for 10 years, 30 per cent for 20 years, and 17 per cent for 25 years.

vealed the thymus as one of the organs which permit the phylogenetic development of animals with advanced tissues, organ systems, and immune systems.³

From a practical standpoint, however, my col-

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SURGERY OF THYMUS / Bernatz

leagues and I have had the opportunity to review the histories of a number of children who have had thymectomy at our institution. Only one of these children subsequently had any problems that might be related to a faulty immune mechanism, this being systemic lupus erythematosus and chronic ulcerative colitis.

Thymectomy in adult life seems to lead to no significant impairment of immune capacity, but Adner and associates⁴ have reported an immunologic survey on 48 post-thymectomy patients, and when compared to a control series, the thymectomized patients demonstrated a reduction in blood lymphocyte count, a reduced cellular hypersensitivity, and a reduction in immunologic capacity.⁵ The authors did not describe any particular clinical problems that might be related to these serologic findings.

Recent investigations about thymic function show that thymectomy for myasthenia gravis is reasonable. Immunologic implications of thymic function and the designation of "immunologic suicide" for myasthenia gravis with both etiologic and prognostic connotations encourage surgeons to continue thymectomy as a mode of therapy.

SURGICAL HISTORY

The modern era of surgical interest in the thymus followed a report by Blalock and associates⁶ in 1939 of a patient with myasthenia gravis from whom a tumor of the anterior mediastinum had been removed and who subsequently derived benefit with respect to her myasthenia gravis. An uneasiness pervaded this report because the authors carefully pointed out that this case involved a tumor in the region of the thymus, actually a cyst, in which no histologic evidence of the thymus was found. Much speculation and presumption was associated with this report.

At the Mayo Clinic generally, thymectomy is offered to all young patients, male or female, who have severe myasthenia gravis and in whom control has been poor with medication. Patients with ocular symptoms alone should not undergo operation because their outlook is good. At the other extreme, patients who are desperately ill with myasthenia should not be operated on as an emergency. Although my colleagues and I have done this occasionally, the results have been sufficiently discouraging that we recommend thymectomy be delayed until reasonable control of the disease has been gained. Many presumed myasthenic crises have resulted

from too much medication, and in these patients, medication must be withheld, respiration supported, and gradual control of the myasthenia gravis regained.

Although the anesthetic management of these patients is challenging, anesthesiologists have not considered their cases as being unusually formidable. Indeed, the patient with myasthenia gravis is safer in the operating room than out, because there his airway and ventilation receive constant attention. Muscle relaxants are generally avoided, even during intubation, and light ether analgesia has furnished excellent operating conditions without the need for amounts involving a curare-like effect.

MEDIAN STERNOTOMY

The operation is accomplished by use of a median sternotomy. The sternal incision can be kept low both for cosmetic purposes and for facilitation of a tracheotomy if necessary. Embryologic derivation from the third branchial pouch forces the surgeon to remove the more cephalad portions of the gland in the neck region but does not require extension of the skin incision to accomplish this. The rather consistent arterial supply from branches of the internal mammary artery and venous drainage into the left innominate vein is not formidable but is annoying if it is not handled properly.

Complete removal of the thymus by the cervical route, as recently revived by Kirschner and associates,⁷ has not appealed to us but has theoretic advantage. We do not employ tracheotomy routinely but prefer to select patients who are ill with bulbar problems or those whose ventilatory function is diminished or inadequate. Ventilation can be evaluated prior to removal of the endotracheal tube, and if ventilation is not satisfactory, the endotracheal tube can be left intact for a few more hours to facilitate mechanical assistance, with the hope that tracheotomy may be avoided. If mechanical assistance is required after 24 to 48 hours, tracheotomy should be done.

ANTICHOLINERGIC MEDICATION

Experience with these patients has made it evident that a primary source of postoperative difficulty is the excessive use of anticholinergic medication. Our postoperative problems have decreased since we have stopped employing the patient's usual amount of medication, as determined from the preoperative schedule, and have used a different philosophy. We now give no medication unless it is deemed necessary through frequent evaluation of the patient's status. This

need may be less apparent if ventilation is being supported artificially. Patients seldom require anticholinergic medication for 24 hours after operation, but then the need usually becomes evident and increases for several days, after which the need may progressively decrease with remission of the disease.

Valid comparisons of the results of thymectomy in myasthenia gravis require complete randomization of patients. However, we have not felt such a program to be reasonable and shall compare the course of thymectomized patients with the course of those who refused operation or who were not considered for surgery because of other circumstances.

At the Mayo institution, of 163 patients with myasthenia gravis who underwent thymectomy, 74 per cent had remission or marked improvement of symptoms, with better control of the myasthenic symptoms on less medication.⁸ Reports from other institutions are similar, though the type of statistics makes direct comparisons difficult. For example, 1,355 patients were studied in a cooperative effort at Massachusetts General Hospital and at Mount Sinai Hospital in New York, and of these, 188 patients without tumor had thymectomy and 55 per cent were improved.⁹ Of the entire group, 75 per cent of the patients who underwent surgery survived five years, while only 57 per cent of the treated medically survived the same period. These authors reported that the mortality rate for females with myasthenia gravis treated surgically was significantly lower than that for females not undergoing surgery. Their results for males suggested also that the remission rate was much higher if thymectomy was done. I agree, and think that the same may be true for any age group if the myasthenia gravis is of recent onset. My colleagues and I are impressed with the more favorable results when the duration of the myasthenia gravis is less than two years.

THYMIC TUMORS

Results with thymoma are more uncertain. More disagreement and confusion over diagnostic criteria, subclassification, and clinicopathologic correlation have been caused by neoplasms of the thymus than by almost any other tumor in the body.¹⁰⁻¹³ Tumors in the region of the thymus may be diverse, thus making it difficult to select a group of tumors that are derived truly from the thymus. Hopefully, our classification of thymic tumors does not include all the lymphomatous tumors or tumors of mesothelial origin (Table 1).

The primary activity of the thymoma that is

of concern is its malignant potential. The histologic structure of the thymic tumors does not permit ready division into benign and malignant tumors; invasion by the neoplasm is the most reliable sign of malignancy and was found in 28 per cent of 197 tumors in one series.¹⁵ The surgeon can best judge this at operation. Unless a pathologist has histologic evidence of extracapsular invasion, it is sometimes difficult

TABLE 1
CLASSIFICATION OF THYMIC TUMORS

<i>Andritsakis & Sommers,¹⁴ 1959</i>		<i>Bernatz, Harrison, & Clagett,¹⁰ 1961</i>	
Thymic tumors		Thymoma	Noninvasive
Epithelial			Invasive
Undifferentiated			
Reticular			
Spindle cell			
Clear cell			
Trabecular		Predominantly	
Epidermoid		Lymphocytic	
Glandular		Epithelial	
Adenoacanthomatous		Mixed	
Lymphoid		Spindle cell	
Embryonic			
Fatty			
Cystic			
Hyperplastic			

for him to look at a section of a thymoma and predict its malignant potential. In fact, this is one of the bits of circumstantial evidence that suggest the possible hormonal activity of tumors of the thymus, because a similar problem can be found in other neoplasms of endocrine origin, such as chemodectomas and adrenal and pancreatic lesions.

In the presence of invasion (27 per cent), a survival rate of 17 per cent was noted at 10 years, but at 20 years, there were no survivors.¹⁵ Among the patients with noninvasive tumors, and particularly among those patients who do not have myasthenia gravis, cures can be discussed because after about the eighth year following resection the curve for survival parallels that of the normal population, according to the Berkson and Gage calculation method.¹⁶

Patients with invasive tumors invariably died from complications of local invasion, such as pericardial tamponade and other cardiorespiratory complications. Distant metastasis is rare; for example, in our series of 197 patients, only two had distant metastasis.

Consideration of the relationship of survival to predominant cell type revealed that patients with spindle cell or predominantly lymphocytic

SURGERY OF THYMUS / Bernatz

cell tumors had a much better survival rate than did those with mixed or predominantly epithelial cell lesions. The long-term outlook for patients with the epithelial cell type of thymoma is discouraging. There were no long-term survivors in this group. Interestingly, 51.4 per cent of the tumors with predominantly epithelial cells were invasive. However, 14.3 per cent of the tumors with lymphocytic cells and 15.9 per cent of the tumors with spindle cells were associated with invasion. Tumors of mixed cells had a much higher incidence of invasiveness, namely 40.8 per cent, indicating the invasive potentiality of epithelial cells; and only 7 per cent of patients with this cell type survived 15 years.

The prognosis is ominous when myasthenia gravis is associated with thymoma (45 per cent). The 20-year survival rate of patients with associated myasthenia gravis was 21.3 per cent, or half the 20-year survival rate for patients without associated myasthenia gravis (41.2 per cent).¹⁵ The follow-up studies, which were possible in 99 per cent of cases, revealed that most of these patients died from the complications of myasthenia gravis rather than from the local or metastatic effects of the thymic tumor. The outlook for patients with invasive thymoma and myasthenia gravis was approximately the same; there were no survivors after 18 years. This was not true for the patient with noninvasive tumors without myasthenia gravis for whom the 20-year survival rate was 60.9 per cent; this rate paralleled the normal population survival.

TUMOR SURVIVAL RATE

The overall survival among 197 patients with thymic tumors was 65 per cent for five years, 50 per cent for 10 years, 30 per cent for 20 years, and 17 per cent for 25 years.

Results at our institution after thymectomy for myasthenia gravis are sufficiently encouraging that we have liberalized our indications with respect to age and sex. Operation is offered to most patients whose symptoms cannot be controlled by a good medical program, particularly when the duration of the myasthenia gravis is less than two years. We have noted good results in 80 per cent of such patients, with complete remission in 30 per cent.⁸

The accumulated experience with thymic tumors does not permit complacency. Factors that influence the prognosis of the patients with a thymoma include (1) presence or absence of in-

vasion, (2) associated myasthenia gravis, and (3) histologic cell type.

Invasion was present in 28 per cent of the 197 thymic tumors. At 10 years after operation, only 17 per cent of patients with invasive tumors were alive as compared to 64 per cent of patients with well-encapsulated tumors. Invasion is not always easy to determine because the desmoplastic reaction as well as the inflammatory reaction around the thymoma may be marked and may simulate invasion of the tumor. Invasion may be especially difficult to determine when there is adherence to the pericardium, and initially the lesion is ominously fixed, as palpated by the surgeon's exploring hand. If there is any question of invasion, the pericardium and lung (which are the most frequently adherent tissues, other than pleura) can be readily excised with the neoplasm. Because thymomas exert their malignant effects locally, the surgeon must be aggressive in his resection.

COMPLETE EXCISION

In the presence of associated myasthenia gravis, a complete excision of the thymus must be accomplished, along with removal of the tumor. Our experience, as well as the experience of others, offers adequate justification that the association of myasthenia gravis and thymoma is particularly ominous.¹⁰ Long-term follow-up reveals an early toll taken by the invasive complications and a delayed but equally discouraging devastation by the myasthenia gravis. However, 23 per cent of patients had remission or marked improvement of their myasthenic symptoms after removal of the thymus and thymoma.¹⁵

The various clinical syndromes associated with thymic tumors provide impetus for speculation and research. Agenesis of the erythrocytes, acquired agammaglobulinemias, Cushing's syndrome, dermatomyositis, and granulomatous myocarditis may provide perplexing clinical findings. We can only speculate why removal of the tumor does not frequently cure or influence the serologic manifestations, why the thymic tumor and the unusual extrathymic diseases may appear at different times, and whether the tumor may damage or alter the function of the remaining thymic tissue and prevent emergence of the immunologically active cells which may be attributed to thymic function.

Retrospective studies offer little in solving these puzzles, and we need to study all of these patients prospectively with everything at our command, including complete hematologic and immunologic surveys. So much information has

been compiled about these patients, and yet so few definite statements can be made.

CONCLUSION

Of 163 patients with myasthenia gravis who underwent thymectomy, 74 per cent had remission or marked improvement of symptoms. Good results were noted in those who had the disease less than two years.

Results of up to a 27-year follow-up of 197 patients with thymoma revealed the ominous effect of associated myasthenia gravis and invasion. The predominant cell type in the thymic tumor was also an important prognostic factor. Patients with epithelial-cell tumors had a poor long-term survival rate (7 per cent). This type of tumor also had the highest percentage of gross invasion (51 per cent). Overall survival rates for the 197 patients with thymic tumors were 65 per cent for five years, 50 per cent for 10 years, 30 per cent for 20 years, and 17 per cent for 25 years. ★★★

Mayo Clinic (55901)

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The Significance of Analytical Toxicology in the Treatment of Poisoning

ARTHUR S. HUME, Ph.D. and
JOHN D. BOWER, M.D.
Jackson, Mississippi

THE DEMAND FOR toxicological services has increased tremendously in recent years. The increase in requests for analyses has been the result of several factors. Increase in the abuse of drugs in our society is a major factor. It is estimated that over 50 per cent of the teenagers in the United States have experimented with at least one drug.¹ Overdosage with drugs is one of the leading causes of death in children under 15 years of age in New York City.

It is difficult to determine the extent of the abuse of drugs in our own state, but it can be stated that the use of drugs is certainly greater than in previous years. The availability of drugs to small children has increased because a larger percentage of our population are on maintenance drugs than in previous years. The number of self-poisoning cases with drugs, both accidental and intentional, has increased. In one community, where a comprehensive study of incidence figures are available, the rate of self-poisoned patients increased 235 per cent between 1962 and 1967.²

More and more of these cases are multi-agent overdoses; that is, two or more drugs are present to produce toxic response. Therefore, the need for the analysis of body tissue for drugs and other agents has increased greatly in recent years. It is of the utmost importance in some cases of mixed poisoning that all the agents be recognized. For example, the attending physician should be aware that he is treating an overdosage of amitriptyline and perphenazine, rather than amitriptyline alone,

for the treatment of the two situations would differ greatly.

Demand for toxicological services has increased greatly in recent years. Increased use of drugs and subsequent overdosage and poisoning problems are primary factors in the increase. The authors discuss acute and chronic analytical toxicology at UMC and specific cases treated there.

In cases in which combinations of alcohol and drugs which produce convulsions are present, the choice of anti-convulsants should be based somewhat upon the possibility of potentiating the central nervous system depression of the alcohol. Consequently, it is necessary to screen the patient for alcohol and drugs to become aware of all the possibilities.

Analytical toxicology at the Medical Center may be divided into two categories, acute and chronic. In acute toxicology cases, determinations of the character of the toxic substance and its quantity can be life saving in the treatment of over-dosages cases, for the treatment can then be more specific. The specimens for analysis are processed at the University Medical Center on an emergency basis. The analysis revealing the causative agent may require 30 minutes to several hours, depending upon the nature of the toxic agent. These acute cases may include inorganic compounds (boric acid, phosphorous or arsenic, etc.) or organics (pesticides or drugs such as

From the Departments of Medicine and Pharmacology and Toxicology, University of Mississippi School of Medicine, Jackson, Miss.

barbiturates, tranquilizers, alcohol or narcotics, etc.). The most frequently encountered cases of overdoses at the University Hospital do not involve barbiturates as in previous years, but are more likely to contain combinations of either alcohol and/or tranquilizers and sedatives.

In cases in which the causative agent or agents is not known, the specimen is submitted to a "general" toxicological screening procedure which first involves a qualitative analysis for alcohol or other volatiles. Then the specimen is subjected to a separatory analytical procedure which separates acidic, basic, neutral and narcotic drugs.

In addition, the sample will be examined for heavy metal by atomic absorption spectrophotometer, if this determination is deemed necessary at this point. An analytical toxicology laboratory is requested to analyze for a wide array of organic and inorganic substances. The method of analysis selected is dependent upon the situation, the history of the patient and the suspected toxic agent. Gas chromatography is employed for the determination of volatiles, i.e. alcohols, amphetamine, some sedatives and other drugs. Ultraviolet spectrophotometry is utilized for the analysis of organic drugs in general. Thin layer chromatography and infrared spectrophotometry are also employed in specific situations. Spectrophotometry is utilized in the determination of hallucinogenic agents as LSD, psilocybin, mescaline and others.

TOXICOLOGICAL ANALYSES

The results of toxicological analyses are considered essential in the evaluation of a patient in an acute toxic condition to determine if the concentration of the poison is sufficiently toxic to require rapid removal by hemodialysis to insure survival of the patient. Not only is the qualitative and quantitative determination of the poison helpful, but the dialyzability and the removal rate of the poison by hemodialysis can be of aid in the treatment of the poisoned patient. The toxicology laboratory at the University of Mississippi cooperates closely with the Artificial Kidney Unit at the Medical Center in this respect.

A few typical acute cases involving toxicology are described below:

A female patient was admitted with a history of phenobarbital ingestion. She was comatose and areflexic. An analysis of a blood sample revealed a concentration of 13 mg. per cent phenobarbital. A blood level such as this and clinical symptoms as manifested are considered criteria for necessary hemodialysis. The patient was placed on dialysis until she awakened.

A female patient, six months pregnant, was ad-

mitted to the University Hospital with a history of acute onset of symptoms of loss of consciousness, ataxia, etc. Her condition was considered neurological in origin until a blood level of five mg. per cent phenobarbital was determined. The patient was treated as a drug overdose case with supportive therapy.

A male patient was admitted in a severe comatose condition with a history of possible ingestion of tranquilizer, aspirin and narcotics. However, toxicological analysis of blood sample revealed that he had ingested none of the suspects, but had a sufficient quantity of a non-narcotic analgesic and alcohol to produce the central nervous system depression observed. It was determined that the patient could be treated adequately with supportive therapy.

ACUTE CASES

Perhaps the greatest contribution a toxicology laboratory can make is in acute cases in which the history of the patient is inadequate or obscure. This situation occurs quite frequently in cases in which the patients are children, and it is not known whether the symptoms are the responses of a foreign agent or are the results of other disorders.

In areas of chronic toxicology, the requests of heavy metal analysis far exceed request for other examinations in this area. A number of cases of poisoning have been uncovered by the determination of lead, mercury or arsenic in urine and/or blood. It is of particular value to screen the urine of people who are exposed to lead in their occupation or who have histories of chronic ingestion of "moonshine" whisky.

In addition, the laboratory receives requests to monitor drug levels of therapeutic agents being used chronically in which a certain blood level is necessary or toxic levels are to be avoided. An example of these are patients receiving aspirin, sulfonamides, lithium and tranquilizers.

PESTICIDE PROBLEMS

An area of immediate need is toxicology of pesticides. Mississippi is one of the leading states in the use of pesticides. Our population is exposed frequently and numerous cases of poisoning have already been reported. With the knowledge that massive overdoses of pesticides have occurred in other parts of the world, the facilities in the state for the detection of pesticides should be expanded.

The toxicology laboratory also functions in determinations of the cause of death where drugs or poisons are suspected. Recently, samples of blood, gastric contents and liver were submitted

for examination. A barbiturate was detected in large concentration in the blood, residue of barbiturate capsules were identified in the gastric content and a relatively low level of drug was found in the liver. From the relationships of these findings, it can be surmised that this person had ingested a large amount of barbiturate just a short time prior to death. This introduces the probability of suicide.

It is apparent from requests for toxicological analyses at the University Hospital that a laboratory which could make toxicological analyses

available to physicians on a statewide basis is essential to the well-being of the people of the state. With expansion of present facilities, the laboratory at the University could handle the medical toxicology needs for the state and continue to aid the crime laboratories in the analyses of drugs of abuse and biological tissue for drugs and/or poisons. ★★★

2500 North State Street (39216)

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PAR AT MATURITY

Rearing a child to age 18 is a costly process, estimates Insurance Economics Survey, the official publication of the Insurance Economics Society of America.

The study says that it costs \$580 to be born, \$2,490 for medical and health care, \$8,020 for food, \$3,790 for clothing (discounted for hand-me-downs), \$8,590 for housing, \$3,800 for transportation, \$860 for personal care (haircuts and the like), \$1,920 for recreation, all for a total of about \$30,000.

Then there is \$20,000 for college, about \$??? for the wedding, \$??? for the loan, and \$580 for the first baby. . . .

Use of Artificial Kidney in Cases of Poisoning

JOHN D. BOWER, M.D., and
ARTHUR S. HUME, Ph.D.
Jackson, Mississippi

SINCE THE INSTALLATION of the Artificial Kidney Unit at the University of Mississippi Medical Center in 1967, the unit has been requested to assist in the treatment of numerous cases of poisonings admitted to the University Hospital. The purpose of this paper is to familiarize the reader with the use of the artificial kidney in rapid removal of poisons.

The artificial kidney was first used clinically for the treatment of acute poisoning in 1950. Since that time, the list of dialyzable poisons has grown to such an extent that a detailed discussion of all these substances would not be possible.¹

It is most important that the reader understand at the onset that hemodialysis does not substitute for good supportive care of the poisoned patient. Dialysis is the most rapid means of removing a poison from the blood, but prompt gastric evacuation and maintenance of an adequate airway and other supportive therapy cannot be over-emphasized.

In cases of poisoning, the question "Is this poison dialyzable?" must be answered. The following criteria for judging the applicability of dialysis in the therapy of poisoning were established by Schreiner:²

1. Molecules should diffuse through the dialyzing membrane, such as cellophane or peritoneum, from plasma water and have a reasonable removal rate or dialysance.

2. The drug must be distributed in plasma water or accessible body fluid compartments, or

readily equilibrate with the circulating volume. Tight protein or tissue binding limits dialysis. This limitation is diminished if the bound or loculated portion can equilibrate with plasma water during the usual time of clinical dialysis.

Hemodialysis can safely and effectively remove many intoxicating agents from the poisoned patient. These include aspirin and barbiturates which are readily removed, many sedatives which are less readily removed and phenothiazines which are poorly removed. Some antibiotics are also readily dialyzed. The Medical Center Artificial Kidney Unit in the Department of Medicine is equipped to do both lipid and aqueous hemodialysis in those patients in whom conservative management will not suffice.

3. There should be a relationship between the blood concentration, the duration of the body's exposure to the chemical, and its ultimate clinical toxicity. This has been termed the "time-dose-cytotoxic relationship."

4. The amount of poison dialyzed should constitute a significant addition to the normal body mechanisms for dealing with the particular poison under the physiologic circumstances which may be encountered under clinical conditions of intoxication. The mechanisms include metabolism, conjugation, enzyme induction, pharmacologic antagonism, and elimination of the substance by bowel and kidney. The physiologic circumstances may

From the Departments of Medicine and Pharmacology and Toxicology, University of Mississippi School of Medicine, Jackson, Miss.

include shock, oliguria, and poor liver perfusion. Metabolic rates may not be extrapolated from the normal dog to the sick patient.

The indications for hemodialysis vary quite widely but the clinical symptoms of severe central nervous system depression and a toxic blood level of barbiturate as quantitated by analysis are considered indications for hemodialysis. A blood level of 3.5 mg. per cent or ingestion of 3.0 gm. of a short-acting barbiturate is an indication of severe intoxication. A blood level of 8.9 mg. per cent or the ingestion of 5.0 gm. of long-acting barbiturates is indication that hemodialysis may be necessary. This is particularly true when alcohol or other drugs may be present. In general, the patients treated by hemodialysis have a 10-30 times faster removal of barbiturates than by the other most efficacious method, which is forced diuresis. Dialysis definitely shortens the duration of coma and increases survival rate. Although the rate of removal of short acting barbiturates is significantly less than for the long acting preparations, due primarily to their protein binding, it is felt that even here the small quantity removed by hemodialysis has considerable pharmacologic and clinical significance.

GLUTETHIMIDE HEMODIALYSIS

Hemodialysis for glutethimide intoxication has proven to be much less effective than it is for phenobarbital poisoning. This is preferentially several factors. Glutethimide is preferentially sequestered in body fat where the drug may be concentrated 10-15 times that of the blood concentration. Glutethimide is also protein bound and the amount recovered by hemodialysis is small relative to the ingested dose. Blood levels do decline more rapidly with dialysis than with conservative therapy and it is felt that it definitely shortens the duration of coma. Internal recycling such as might occur through the biliary system with intestinal re-absorption sometimes will require a second or even a third dialysis, when the patient goes back into coma after being awakened by dialysis.

Other methods that have been attempted to facilitate removal consist of biliary drainage and induction of diarrhea with sorbital. Neither of these have proven to be extremely efficacious. Patients who have ingested an overdose of glutethimide have a tendency to develop pulmonary edema and this tends to contraindicate osmotic diuresis. Peritoneal dialysis is much less efficient than hemodialysis, but several modifications of this have increased its efficiency. Some investigators add fat emulsions to the peritoneal fluid

and have enhanced markedly the rate of removal of glutethimide by this method. Still others have hemodialyzed patients using only fat emulsions as the dialysate with a significant improvement. Fat emulsions have definitely increased the clearance during both hemodialysis and peritoneal dialysis. It is felt that dialysis is definitely indicated when 10 or more gm. of glutethimide has been ingested or the blood level is in excess of 3.0 mg. per cent.

TRANQUILIZER INTOXICATION

It is somewhat difficult to discuss the effectiveness of dialysis in the management of intoxication with tranquilizers since overdosage of any one tranquilizer is relatively rare. Good reports have been published for the dialysis of paraldehyde, methpyrion (Noludar®), phenelzine (Nardil®) and primidone (Mysoline®). Fair results have been reported in the dialysis of pargyline hydrochloride (Eutonyl®), imipramine (Tofranil®), amitriptyline (Elavil®) and ethchlorvynol (Placidyl®). Dialysis studies of the phenothiazine group (chlorpromazine, chlorproperazine) have shown that hemodialysis is not very effective. It is felt that the high percentage of protein binding interferes with the transference from blood to dialysate. The dialysis of chlordiazepoxide (Librium®) and diazepam (Valium®) are reported as poor.

Considerable success has been observed in the Artificial Kidney Unit at the University of Mississippi Medical Center with the use of lipid dialysis for ethchlorvynol (Placidyl®). Soybean oil was used as the dialysate bath rather than water. This resulted in a threefold increase in removal rate of ethchlorvynol.

SALICYLATE REMOVAL

Acetylsalicylic acid has been studied extensively being the original agent that was experimentally removed from intoxicated dogs in 1913.³ The artificial kidney removes salicylates three to five times faster than the human kidney. Survival has been reported after the ingestion of as much as 150 and even 210 gm. when treated with dialysis. It is recommended that patients with blood levels above 90 mg. per cent be strongly considered for dialysis for two reasons. First of all, dialysis will correct the severe state of acidosis that exists and also correct the associated electrolyte abnormalities. Dialysis will also prevent the later complications of salicylate intoxication, namely bleeding.

Peritoneal dialysis and exchange transfusion have been recommended, but hemodialysis proves to be much more efficacious than either of these

methods even when albumin was added to the peritoneal dialysis fluid.

Methyl salicylate intoxication has also been treated successfully on several occasions with hemodialysis. Dextro propoxyphene hydrochloride (Darvon®) has also been treated successfully with hemodialysis.

Clinically, ethyl alcohol would rarely, if ever, require hemodialysis except after massive ingestion with severe life threatening intoxication. There have been several patients, however, who were inadvertently dialyzed for ethyl alcohol intoxication that were presumed at the onset to be intoxicated with methyl alcohol. One case was reported where the blood level of ethanol was 284 mg. per cent and fell to 46 mg. per cent within three hours after being placed on the artificial kidney. The plasma concentration of ethyl alcohol decreases 6-11 times faster with dialysis than spontaneously and the level of methyl alcohol decreases 40-60 times faster with dialysis. There are two indications for prompt dialysis in methyl alcohol intoxication. One is to accomplish rapid removal of the methyl alcohol or its degradation products and the second is to correct the severe metabolic acidosis that exists. Hemodialysis can alter the course of the visual impairment that follows methyl alcohol intoxication.

ETHYLENE GLYCOL

Ethylene glycol (permanent antifreeze) is a frequently encountered substance that is accidentally ingested. Here again, there are two reasons to promptly place this type of patient on the artificial kidney as soon as the diagnosis is made. One is that ethylene glycol has a direct nephrotoxic effect that will cause acute renal failure if not removed promptly and another is the acidosis from ethylene glycol intoxication. This can be corrected quite promptly with dialysis. It is felt that methanol and ethylene glycol are best managed by prompt and early hemodialysis when this treatment is available.

Accidental salt poisoning can be handled either by the artificial kidney or with peritoneal dialysis. The serum sodium has been promptly lowered in cases of hypernatremia in several documented cases with favorable results being reported. The correction of hyponatremia by dialysis has also been well-documented many times. Potassium can be handled very promptly by hemodialysis. This is done in two ways. First of all there is a rapid net removal of potassium from the blood stream plus a prompt shift of potassium back into the intracellular compartment if systemic acidosis is a contributing factor. Many acute and chronic renal failure patients have been saved from death

due to hyperkalemia by the artificial kidney. Magnesium intoxication is also seen in this group of patients and can be handled quite readily with the artificial kidney. Peritoneal and hemodialysis have also been used to manage acute hypercalcemia crisis quite successfully.

A good response to dialysis has been noted in cases of intoxication due to streptomycin, kanamycin, vancomycin, penicillin, sulfamethoxypyridazine, isoniazid, and cycloserine. Methacillin, oxacillin, tetracycline, chloramphenicol, and colistin are very poorly removed by dialysis. Dialysis has also been used to treat the hemolytic anemia associated with sulfamethoxypyridazine ingestion. Information on the dialysance of antibiotics is accumulating very rapidly due to the recent emphasis on the maintenance of life in chronic uremia by dialysis and transplantation.

THIOCYANATE INTOXICATION

Hemodialysis has been used successfully in the treatment of thiocyanate intoxication as well as sodium chlorate and potassium chlorate intoxication. It has also been used to manage the methemoglobinemia due to aniline dye poisoning. Boric acid poisoning has also been treated successfully with dialysis. Carbon tetrachloride likewise has been treated successfully with dialysis following accidental ingestion. In one instance where several hundred ml. of carbon tetrachloride were ingested, prompt institution of hemodialysis prevented both hepatic and renal insufficiency.

Digitalis is very poorly dialyzed. To the contrary, severe fatal cases have now been reported where digitalis intoxication developed while the patient was on dialysis. This was due to a sudden shift in serum potassium. This is a documented potentially lethal complication of dialysis. Sodium citrate and dextroamphetamine have both been treated by the artificial kidney with good results. Atropine poisoning failed to respond to hemodialysis.

ETHCHLORVYNOL

At the University of Mississippi Medical Center the most common intoxicating agent seen is ethchlorvynol (Placidyl®). Few of these patients have actually required hemodialysis, but it is apparent that more suicide is being attempted with this compound than with the barbiturates. We have also dialyzed several patients for barbiturate and aspirin intoxication. We have seen several methyl alcohol intoxications, as well as carbon tetrachloride and gasoline.

The Artificial Kidney Unit is equipped to do toxicology dialysis using both aqueous and lipid bath solutions. As the experience of the person-

nel involved with the operation of the dialysis unit has increased, the actual number of patients requiring hemodialysis has decreased. It was once felt that if a patient was unconscious to the extent that access could be achieved to the blood stream without the use of local anesthesia, then hemodialysis was indicated. It is felt now that with intensive nursing care, this criterion is no longer applicable. It is, however, safe to state that dialysis is usually not indicated if the patient responds to the pain of a cut down or needle puncture.

The artificial kidney is currently proving itself to be an accepted means of therapy for the management of many toxicological problems. It is in no way a substitute for conventional medical management, nor should it ever replace such essentials as gastric lavage, maintenance of airway, and general supportive care of the comatose patient. Dialysis may be looked upon as the definitive method for management of a toxicology problem. This is particularly true if the patient has become hypotensive and is incapable of maintaining liver and kidney blood flow. This would result in an inability to remove the substance by normal mechanisms. Dialysis should be considered in any comatose patient even with adequate hepatic and renal function if there are existing complications of coma itself. An example of this would be in a patient with extensive pneumonia and a prognosis of prolonged coma. The prompt removal of offending agents that are capable of direct tissue toxicity is also indicated. If the patient has ingested ethylene glycol, methyl alcohol, or carbon tetrachloride, then immediate di-

alytic intervention is indicated even in the absence of coma as these agents are capable of producing direct tissue injury.

For these reasons, precise analytical determination of blood levels is essential to the management of the intoxicated patient. Although the hazards of hemodialysis are minimal, exposing any patient to this procedure without there being a good chance of benefiting the patient is obviously contraindicated.

The precise role of dialysis in the management of poison and drug intoxications remains unknown. Our experience leads us to believe that certainly not all patients with drug overdose are candidates for hemodialysis. Neither do we feel that dialysis should in any way substitute for conservative medical management. There is a group of patients, however, in whom medical management will not suffice. It is this population in whom early intervention with hemodialysis is indicated.

2500 North State Street (39216)

The authors would like to acknowledge the work of Dr. George E. Schreiner, editor of the *Transactions of the American Society for Artificial Internal Organs*, for his continuing work in the field of the dialysis of poisons and drugs. His annual review of the literature, as well as his personal contributions, has proven indispensable to those of us involved in this field.

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COLLECTIVE SECURITY

At a meeting of the local American communist cell, the comrades were discussing plans for world revolution. The chairman asked for comment and observations.

"Comrade chairman," timidly inquired a member, "what will happen to our unemployment compensation when we have overthrown the imperialist facists in Washington?"



MEETINGS

NATIONAL AND REGIONAL

American Medical Association, Annual Convention, June 20-24, 1971, Atlantic City, Clinical Convention, Nov. 28-Dec. 1, 1971, New Orleans. Ernest B. Howard, Executive Vice President, 535 N. Dearborn St., Chicago, Ill. 60610.

STATE AND LOCAL

Mississippi State Medical Association, 103rd Annual Session, May 3-6, 1971, Biloxi. Mr. Rowland B. Kennedy, Executive Secretary, 735 Riverside Drive, Jackson 39216.

Mississippi Academy of General Practice, Annual Assembly, June 24-26, 1971; Biloxi. Miss Louise Lacey, Executive Secretary, P.O. Box 3112, Jackson 39207.

Amite-Wilkinson Counties Medical Society, Third Monday, March, June, September, December. James S. Poole, Centreville, Secretary.

Central Medical Society, First Tuesday, January, March, May, September, November, 6:30 p.m., Primos Northgate Restaurant, Jackson. Robert P. Henderson, Suite B-6, Medical Arts Building, Jackson, Secretary.

Claiborne County Medical Society, 1st Tuesday each month, 6:00 p.m., Claiborne County Hospital, Port Gibson. D. M. Segrest, Port Gibson, Secretary.

Clarksdale and Six Counties Medical Society, Third Wednesday, April and First Wednesday, November, 2:00 p.m., Clarksdale. Walter T. Taylor, P.O. Box 1237, Clarksdale, Secretary.

Coast Counties Medical Society, First Wednesday, January, March, May, September and November. C. Hal Cleveland, P.O. Box 1018, Gulfport, Secretary.

Delta Medical Society, Second Wednesday, April and October. Walter H. Rose, 122 E. Baker St., Indianola 38751, President.

DeSoto County Medical Society, Third Thursday, February and August, 1:00 p.m., Kenny's Res-

taurant, Hernando. Malcolm D. Baxter, Jr., Baxter Clinic, Hernando, Secretary.

East Mississippi Medical Society, First Tuesday, February, April, June, August, October, and December. Reginald P. White, East Mississippi State Hospital, Meridian, Secretary.

Adams County Medical Society, First Tuesday, February, April, June, August, October, and December, Eola Hotel Roof, Natchez. Walter T. Colbert, Jefferson Davis Memorial Hospital, Natchez, Secretary.

North Central District Medical Society, Third Wednesday, March, June, September, and December. James E. Booth, Eupora, Secretary.

Northeast Mississippi Medical Society, Second Tuesday, March, June, September, and December. S. Jay McDuffie, Nettleton, Secretary.

North Mississippi Medical Society, First Thursday, April and October. Cherie Friedman, 1004 Jackson Ave., Oxford, Secretary.

Pearl River County Medical Society, Second Monday, March, June, September, and December. J. M. Howell, 139 Kirkwood St., Picayune, Secretary.

Prairie Medical Society, Second Tuesday, March, June, September, and December. A. Robert Dill, 1001 Main Street, Columbus, Secretary.

Singing River Medical Society, Third Monday, January, March, June, September, and December. Donald E. Dore, Singing River Hospital, Pascagoula, Secretary.

South Central Mississippi Medical Society, Second Tuesday, March, June, September, and December. Julian T. Janes, Jr., 304 Clark, McComb, Secretary.

South Mississippi Medical Society, Second Thursday, March, June, September, and December. W. B. White, Medical Arts Bldg., Laurel, Secretary.

West Mississippi Medical Society, Second Tuesday, January, April, July, and October, 7:00 p.m., Old Southern Tea Room, Vicksburg. Martin E. Hinman, the Street Clinic, Vicksburg, Secretary.

Radiologic Seminar CII

Paget's Disease

T. SCOTT McCAY, M.D.
Jackson, Mississippi

PAGET'S DISEASE, or osteitis deformans, is an osseous condition of unknown etiology and for which there is no specific treatment.

The disease was first described by Sir James Paget in 1877 and is relatively common, affecting 3 per cent of all persons over age 40. Males are more frequently affected than females by a ratio of two to one.

Symptoms encountered most frequently are localized pain in the area of skeletal involvement and fatigue. When the skull is involved there may develop basilar invagination, a condition wherein softening of the bones of the base of the skull leads to settling of the skull on the cervical spine, which may lead to neurological complications. Symptoms of this disease develop gradually since it is a slowly progressive process. The disease may be limited to a single site or may involve multiple areas of bone.

The basic pathology involved in Paget's disease consists initially of replacement of normal bone by a very vascular fibrotic tissue. There follows a reparative process wherein osteoblastic activity is quite disorganized leading to development of a characteristically coarsened trabecular pattern in the involved bone. Frequently, there will develop an expansion of the affected bone during the process of abnormal repair. Finally, when the disease becomes inactive, the involved bony structures will present a diffusely sclerotic appearance, so-called "ivory bone."

While this disease is basically a progressive process, frequently it is possible to divide the disease into three separate stages based on x-ray appearance. Initially one sees a lytic type defect. This appearance is most often seen in the skull where a localized, well defined, washed out area of deossification is seen. Next one sees beginning of the reparative process, wherein mixed lytic areas of demineralization are seen along with areas of new bone osteosclerosis. This is the classical x-ray pattern.

Finally as the disease becomes quiescent there develops a diffuse sclerosis producing the "ivory bone" x-ray appearance. When long bones are involved, the disease always extends to one end of the bone. Bowing deformities are frequent in long bones secondary to weight bearing stress. Fractures are relatively frequent, but heal readily.

Differential diagnosis of Paget's disease from metastatic tumor can at times be difficult. Usually, the coarsened trabecular pattern of Paget's disease, which one does not see in osteoblastic metastatic disease, will provide the distinguishing clue.

Among the complications seen in this disease are fractures of the involved bones and rarely sarcomatous degeneration. Also, particularly if there is widespread disease, during the destructive phase there will be hypercalciuria which may lead to renal calculi. Occasionally congestive heart failure develops secondary to shunting of blood through the hypervascular areas of affected bone. Neurological complications resulting from basilar invagination of the skull and

Sponsored by the Mississippi Radiological Society.
From the Department of Radiology, St. Dominic-Jackson
Memorial Hospital.

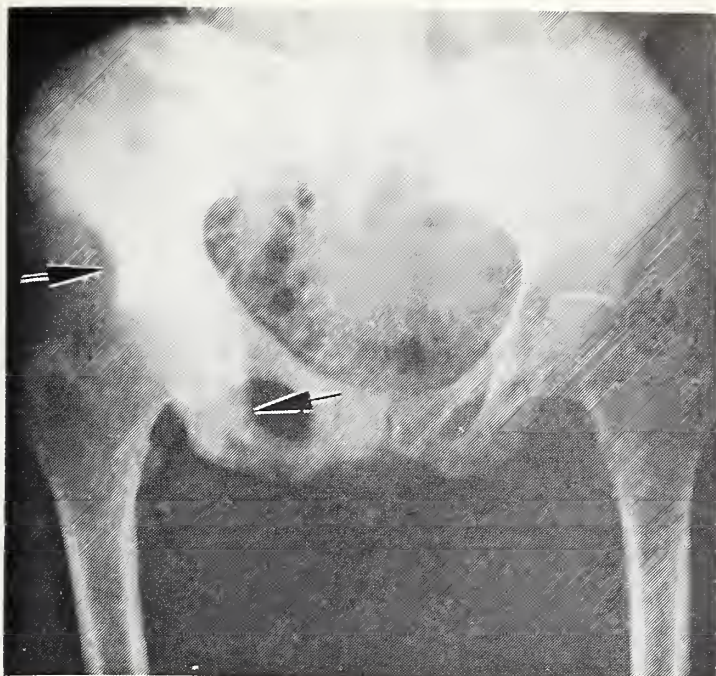


Figure 1. Note sclerotic appearance of ilium with disorganized trabecular pattern (upper arrow). Also, note expansion of ischium (lower arrow). Bony structures of left side of pelvis are normal.

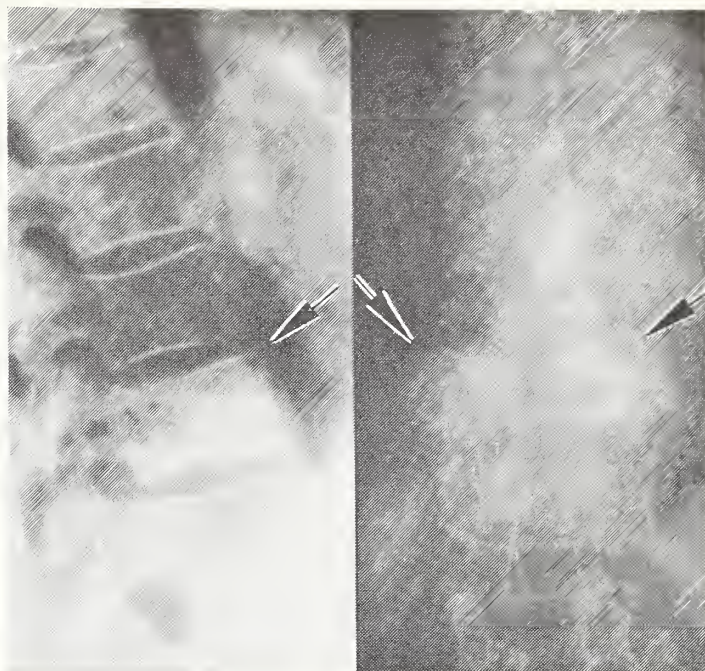


Figure 2. Lateral and AP views of 11th thoracic vertebra (arrows) demonstrating mixed or combined changes. Note coarse vertical striations and increased density. Also note increase in AP and lateral dimensions and compression deformity.

compression fractures of the spine are also seen.

The presented radiographs are those of a 79-year-old female who was admitted to the hospital for gastrointestinal complaints. During the course of a diagnostic work-up skeletal lesions of Paget's disease were demonstrated. The patient was entirely asymptomatic in the areas of skeletal involvement. The alkaline phosphatase was found to be moderately elevated, as is often the case.

In summary, Paget's disease is a relatively common bony disorder which may be localized to one area or may be widespread. Symptoms are frequently minimal and not uncommonly the disease is entirely asymptomatic. Often the disease is first suspected when radiographs obtained

for other purposes reveal changes in bones diagnostic of the disease. ★★★

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3. Wilmer, Daniel and Sherman, Robert S.: Roentgen Diagnosis of Paget's Disease (Osteitis Deformans). Medical Radiography and Photography 42:35-78, 1966.
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CELESTIAL SYNDROME

"I can't understand why I have so many headaches," the young patient complained to his doctor. "I don't drink, smoke, stay out late or even bother with women. What's wrong?"

"I'd guess," was the reply, "your halo is on too tight."



The President Speaking

'LPN's Fight Drug Abuse'

PAUL B. BRUMBY, M.D.
Lexington, Mississippi

IN KEEPING WITH THE times, Mississippi licensed practical nurses recently held a two-day workshop on drugs and drug abuse. This in-depth program was well executed by a committee of LPN's and their physician advisers. The problems discussed were of deep concern to the individuals at the workshop and to every hospital, hospital staff, nurse and physician. In many of the hospitals this problem has been of great significance and there has been loss and downgrading of personnel. Too, it has been reported that there are more Mississippi physicians who are drug users at present than there has ever been known or suspected before.

After seeing this group, who called themselves The Bedside Nurses' Association, we wonder that so many are taking the time, the effort, and bearing the expense of attending this educational seminar. We congratulate their continuing educational efforts and deep interest.

The discussion and examination of these problems range from the consideration of personality and character defects of the drug and alcohol addict to the young and adventurous who will try experimenting once. Why people continue to lean on pills and alcohol was among these discussions. The question always comes up of marihuana smoking. Is it the fore-runner of future habituation and will it demand a stronger crutch in the future or is it a passing fad and fancy? Is it primarily a social or a medical problem? Last year under our Auxiliary Drug Abuse Program, many physicians made talks at civic clubs and high schools. How much good was accomplished is uncertain. But most were reassured, after talking to the high school groups, that this is as fine a generation as our country has ever produced. The only difference is that the minority dissidents have the facilities to scream louder than ever before.

Before lifting a finger at nurses about drugs and drug abuse, we have to take stock of our own situation. In the *JAMA* in September and the first week in October there were found six physicians whose deaths were caused by self-administered drugs and a seventh death was attributed to cirrhosis of the liver. We as doctors must take to heart the old cliché as we remind our nurses that any person who takes a single self-prescribed dose of medicine has a fool for a physician. ★★★

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EDITORIALS

The Four Faces of National Health Insurance

I

THE YEAR was 1948, and the legislative bodies of the two nations which bore the brunt of World War II for the Allies were up to their political ears in national health insurance. Except that in Great Britain, where the proponents prevailed, they candidly called it socialized medicine.

But President Truman's "no good, do nothing" 80th Congress, the only one with a Republican-controlled chamber since the 1930's, beat down the Wagner-Murray-Dingell bill amid the hulabaloo of AMA's gaudy campaign. By 1950, both the United States and England seemed to feel that the issue was respectively settled: The British had their National Health Service as a permanent fixture on the medical and governmental scenes. Even Churchill's return to power with a Conservative parliament didn't change that.

In the United States, voluntary prepayment began its phenomenal growth, and the Eisenhower years were times of debate, not action, over federal care of the aging. Now, it turns out, the issues were not settled, for Britain continues to wrestle with a clumsy program giving little enough service for too many pounds and

pence of taxes. In the United States, Medicare and Medicaid are here, and the premiere showing of the Great Health Debate is taking shape. Clearly, national health insurance will be a major issue of the 1972 campaigns.

The stakes are high politically and economically. Of the four major proposals, AMA's Medigap is said to be the least expensive, and its costs are estimated at \$10 billion the first year. Sen. Edward Kennedy's (D., Mass.) proposal could run as much as \$77 billion annually. Present indications are that battle lines will be sharply drawn with a host of unlikely allies arrayed against an equally incongruous grouping of adversaries. It may be difficult to say exactly who is on whose side.

II

The four major proposals are in formal legislative proposals before the lame duck 91st Session of the 91st Congress where exactly nothing will happen to or for them. But we can anticipate their reappearance in January with the convening of the 92nd Congress in more and elaborate versions with sponsors by the score. The power bases of the measures are the AFL-CIO; the late Walter Reuther's Committee of 100, a UAW-liberal labor coalition; an axis of Sen.

EDITORIALS / Continued

Jacob Javits (R.,N.Y.), Gov. Nelson Rockefeller, and former HEW Secretary Wilbur Cohen; and the American Medical Association. In a nutshell, these are the proposals:

AFL-CIO Griffiths Program. Entitled the National Health Insurance Act of 1970, H.R. 15779 was introduced by Rep. Martha W. Griffiths (D.,Mich.) in behalf of the AFL-CIO. It would cover all U. S. citizens and any noncitizen who has resided in the country for a year. Coverage is total and comprehensive, offering primary and specialty medical services, optometric and dental services, outpatient care, skilled nursing home services, home health care, rehabilitation services, and emergency transportation.

The patient's choice of physician would be made annually and would remain in effect for that year. For certain services, including physician, dental, and home health, a charge of \$2 per visit would be made to the patients.

The Griffiths plan visualizes prepaid group systems and capitation payment, similar to the British NHS. Payments to hospitals would be made on a per capita basis with adjustment for budgeted costs, local economic conditions, population makeup, and other factors. The program would be administered by a National Health Insurance Board and would be funded by an employee tax of 1 per cent and an employer tax of 3 per cent on a wage base of \$15,000.

The price tag is estimated at \$40 billion per year.

Committee of 100—Kennedy Program. Formally called the Health Security Program, S. 4297 by Sen. Edward Kennedy was blueprinted by the late Walter Reuther. With no co-pay provisions, HSP would dig deep into the tax till to provide all physicians' services, except that surgery could be done only by an appropriately qualified specialist on proper referral. Skilled nursing home service would be limited, as under Medicare, to 120 days per spell of illness.

Dental services would initially be limited to children but scheduled for expansion to cover all citizens in time. Except for nursing home care limitations, no maximums would be set on other services. Priority would be given to prepaid group care delivery under capitation payments. Fee-for-service, although not prohibited, would command lowest priority, and when the trust fund runs low, these payments would be prorated.

The plan would be financed from three sources: 40 per cent from general revenue

funds; 35 per cent from employer payroll tax; and 25 per cent from employee wage taxes.

Cost estimates vary, but \$40 to \$77 billion annually is the range mentioned most often.

Medicare-Javits Program. Tagged the National Health Insurance and Health Services Improvement Act of 1970, S. 3711 by Sen. Jacob Javits (R.,N.Y.) carries the blessings of New York Gov. Nelson Rockefeller and the fine hand of Wilbur Cohen. Merely an extension of Medicare-for-everybody, the program would build up to coverage of every American by 1973, adding on for the present the disabled, the unemployed, and the poor.

Offering comprehensive care, the Javits plan would also provide prescription drugs with a \$1 per script patient co-pay. Unlike other programs, this one requires the Secretary of HEW to prescribe standards of education and licensure for providers and the qualifications for performance of major surgery. Although a federal program, the HEW could make contracts with states for local administration. Payments for services could be optioned to a capitation basis, health insurance contract, prepaid practice arrangement, or a combination of these.

Social Security would be the financing vehicle, as is now the case with Medicare, but with a sharp increase in that portion of the tax for the health care portion. This would go to 3.3 per



cent on a \$15,000 wage base by 1975 to which the federal government would add an equal amount from general revenues.

The program would cost, according to Social Security Administration estimates, \$66 billion per year.

AMA Medcredit Program. Boasting 20 sponsors in the House of Representatives, Medcredit, the Fulton-Broyhill bill, H.R. 18567, is a three-part program providing basic health insurance for every American. Part A provides for issuance of health insurance certificates to those whose family tax liability is \$300 or less annually. The certificate would be exchanged for a health insurance contract meeting statutory minimums.

Part B would establish a graduated scale of tax credits applied to health insurance purchase based on individual tax liability. It would range all the way up to the millionaire who would get 10 per cent credit.

Part C is the now well-known Peer Review Organization (PRO) under which state medical associations willing and able would have statutory priority in contracting for peer review.

Medcredit offers the least coverage but carries the lowest price tag: \$10 billion a year, according to AMA.

III

The three camps sponsoring the tax-based plans, AFL-CIO, Reuther group, and the Javitts-Rockefeller-Cohen combine, along with others who will be in the picture before 1972, have some common preachments which are already appearing as hard sell support for national health insurance. The arguments have a popular appeal which tends to gloss over their failures in logic. These are the arguments:

The cost of medical care is going so high that only government can foot the bill. The care-cost equation is complex, and there are neither simple explanations of it nor absolute formulae to solve it.

Generally, insurance is the best means of spreading a cost risk to the greatest number for the least unit expense to the assured. This, however, is not necessarily true in government programs, because taxation is not now nor will it ever be the same as an actuarially-determined premium. Taxation falls heaviest upon those frequently least able to pay: The young wage earner, who, for example, must pay ever-increasing Social Security taxes to carry the current program.

Government is not necessarily noted for effi-

ciency in medical care financing and administration, either. So the role of government as the big daddy for all health care is as dubious as it is questionable.

The United States, including the medical community, has historically accepted limited governmental roles in health care, such as the Hill-Burton hospital program, public health service, research financing, and the like. But the track record proves anything but competence to do the whole job.

National health insurance is inevitable. This is the favorite ploy of the hour, saying, in effect, it's coming, so get on the bandwagon. These same proponents like to say that the United States is the only nation in the world with no national health system. Closely associated with this assertion are all sorts of tricky statistics on infant mortality, care availability, bankrupting costs, and the like.

Under most NHI proposals, about the only thing that is inevitable is a back-breaking tax burden and no guaranteed solutions to health delivery problems.

National health insurance will deliver more care. We must be careful to separate medical care organization from financing when we speak of supply. All the financing in the world will not, of itself, train a single additional physician or build a single new hospital bed.

When we extend the care purchasing base, as was done with Medicare and Medicaid, we merely increase the pressures of demand on care organization.

IV

Just about everybody recognizes that the winds of change are blowing, and change has occurred in the delivery of medical care in the United States. But this is not a sufficient reason to abandon the concept of private care organization. Conversely, it is all the reason in the world to strengthen private organization with innovations built around the integrity of private medicine and its astonishing ability to deliver quality care.

Not to be lost in the NHI shuffle are peer review under exclusive physician control, medical association-sponsored care foundations, new concepts in hospitals with graduated levels of care intensity, medical manpower extensions in new allied professional fields, and a host of improvements with solid promise.

Of course, nothing is absolute in terms of comparison, but it seems as if private air lines in the U. S. offer more and better service than

nationalized air carriers. No telephone system in the world can compare to our privately operated AT&T, nor will any state-owned automobile industry ever outproduce Detroit.

So if this shoe fits in privately delivered medical care, the nation will be well-advised to try it on for size. National health insurance is no panacea, is no economic solution, is no guarantor of care delivery, and is quite expensive. We will all do well to remember that there is no such thing as free lunch.—R.B.K.

The Growing Role of the Joint Commission

The Joint Commission on Accreditation of Hospitals has quietly grown into a service organization of a much wider spectrum than its name implies. Quite possibly, JCAH will be serving many more medical facilities than short term acute general and medical hospitals within the present decade.

The Joint Commission came into being in 1951 when the task of inspecting and accrediting hospitals became more of a burden than the professional organization originating the idea could bear. As with so many innovations which have upgraded medical care in the United States, hospital inspection and accreditation was a program of the American College of Surgeons.

Begun as a voluntary, self-initiated care improvement project, the ACS accreditation program remains today essentially the same as initially conceived and implemented. No hospital is forced to submit to accreditation inspection, although it is to the distinct advantage of the institution to do so.

Now, with vastly expanded activities, JCAH is sponsored by four organizations: the American College of Physicians, the American College of Surgeons, the American Hospital Association, and the American Medical Association. By apportionment of commissioners, actually the voting directors, no single organization can or does dominate the commission. The internists and surgeons have three commissioners each, while AHA and AMA respectively have seven for a total of 20 voting members. The organizations bear their proportionate share of expenses necessary to operate the Joint Commission above earnings from fees charged.

A scant four years ago, JCAH initiated its Long-Term Care Facilities Accreditation Program. Still another activity, the Accreditation of Rehabilitation Facilities Program, is now operational. With the long established, original-purpose hospital program, JCAH now has three important areas of work.

Two new programs are in developmental stages: the Accreditation Council for Facilities for the Mentally Retarded and the Accreditation Council for Psychiatric Facilities. A basic aim is to get these new activities in full swing by or before completion of the community mental health and retardation centers program which is going great guns throughout the nation.

Strengthening this service expansion by JCAH is the affiliation of 15 national organizations in the nursing home, care of the aging, rehabilitation, speech and hearing, voluntary health agency, and mental health fields. JCAH is consulting these organizations in developing yardsticks with which to measure care quality in the new areas of service.

Over the years, JCAH has been discussed and cussed, praised and berated, thanked and attacked for its work. By and large, however, American medicine has agreed that exacting measures of institutional care quality are desirable and that JCAH provides a service which is essential. Areas of disagreement have generally centered around how the task should be under-



"Beautiful opening, Parmillee—only it happens to be in my arm!"

taken and not on the goal of the task itself.

The growth of JCAH activities in the extension and innovation of health care delivery will be influential and important to patients, physicians, and health service institutions.—R.B.K.

The Doctor Has Everything, Except Time

With wry humor, a physician was recently heard to observe that "I could easily attend all of the meetings of all of the organizations to which I belong, read all the journals and medical publications I receive, and fill out all the forms that now deluge me, but there is one change I'd have to make: I couldn't see any patients."

The strange and distressing paradox in this day of superefficiency, of instant communication, nanosecond information retrieval by computers, and all kinds of assorted miracles of science and technology is that the doctor of medicine finds new and additional burdens upon his shoulders. Every new medical care program brings with it forms and paperwork—so much so, in fact, that it is not unusual to find one to five employees in physicians' offices whose job is forms completion.

Staff meetings, local medical societies, the state association, AMA, a host of specialty societies, voluntary health agencies, committees, and just about any meeting of any organization which pops into the imagination compete savagely for the time of the busy physician. His daily mail can be measured in pounds rather than pieces as the medical literature proliferates to a point of disbelief.

Then there are the throwaway publications, also without number, the tide of one-time mailings, and other chunks of printed matter clogging the postal pipeline. Now we approach the era of audio tapes, special frequency radio, and even TV for medical audiences.

It requires no effort to understand why medical meeting attendance is steadily decreasing. For example, more than 64,000 registered at the 1965 AMA annual convention at New York with just under 25,000 M.D.'s participating. Last June at Chicago, registration was less than 15,000 with only 8,000 physicians present. State medical associations, nearly all with growing memberships, show decreases in annual session registration.

Sooner or later, something will have to give, because physicians cannot meet the demands upon their time which seem to get worse, not better. Better communication with the doctor, requiring less of his time, simplification of paperwork together with a substantial decrease in volume, and greater efficiencies in serving his organizational needs are musts in the immediate future. Many physicians are beginning to feel that they have enjoyed about as much of this progress as they can stand.—R.B.K.

Hijacking and Health Insurance

Air piracy has become a serious and grave problem for the traveling public, the air line industry, and the government. At stake in every such incident are the lives of dozens, property amounting to millions, and national sovereignty because every scheduled U. S. airliner beyond our borders is a flag carrier.

It may be small comfort to those diverted unexpectedly to José Martí International Airport at Havana, but the chances are that their voluntary prepayment or health insurance covers care of illness and injury which could occur during the illicit excursion. The Health Insurance Institute reports that "almost all of the newer hospital, surgical, and major medical insurance company policies apply anywhere on this planet or in the atmosphere, for that matter."

HII further explains that air line "hijacking is not considered an exclusion under these policies." The statement is qualified, however, with the further explanation that "if hijacking were considered an act of war, insurance benefits would not be covered."

Legal precedents to date hold air piracy to be a felony committed by individuals with jurisdiction vested in the nation in which the crime occurs or whose flag is violated internationally. It has been speculated that piracy of four aircraft by Arab revolutionaries could have been held as an act of war, but the revolutionary groups have no recognition diplomatically.

The HII report says that either full benefits would be payable for hijack victims, even in a nation with which the U. S. has no diplomatic relations, or else emergency care and special risk coverage would apply. Medicare does not cover hijack victims, because the only across-the-border payments authorized are emergency admis-

sions to certain close by Canadian and Mexican hospitals.

In recent years, the American tourist has been attracted to travel-accident policies which usually cover him while on his foreign junket. Generally, however, his regular health and medical coverage is valid so long as he travels by scheduled carrier at home or abroad. Ill or injured travelers should consult the nearest U. S. embassy or consulate when stricken abroad as the most reliable source of advice for securing needed medical care.

But without U. S. diplomatic representation where a purloined airplane might end up, it is still a little comforting to know that voluntary health insurance protection goes along, too.—R.B.K.

Can He Do the Job? Then Hire Him!

"Can the man do the job?" This is the question asked by the American Mutual Insurance Alliance about the handicapped. If the answer from the prospective employer is in the affirmative, AMIA's reply is "Hire him!"

There is no stronger supporter of the President's Committee on Employment of the Handicapped than the insurance industry. Along with the handicapped who often do not get hired, despite ability and job performance capacity, the insurance companies are frequently misunderstood, and three popularly held myths bear this out. These are damaging to the employment of the handicapped, and all center around the impaired and workmen's compensation insurance:

—Handicapped workers are more likely to have accidents than other employees.

Fact: The U. S. Department of Labor has the hard data to prove that impaired employees have fewer disabling accidents than nonimpaired employees exposed to the same job hazards. The handicapped experience about the same number of minor injuries on the job as their whole counterparts. The secret of job safety, handicapped or not, is proper classification and placement.

—An employer's workmen's compensation insurance premium will rise if he hires the handicapped.

Fact: That any employee has a physical impairment does not make him inherently unsafe

on the job. Workmen's compensation rates are based solely on the relative hazards of a company's operations and its accident experience.

—The insurance company "won't let the employer" hire the handicapped.

Fact: The best refutation of this myth is in the insurance companies themselves: They are among the largest employers of the handicapped and leaders in employee rehabilitation.

As modern medicine continues to make contributions toward rehabilitation to bring back to gainful employment many a worker hitherto lost to society and himself, physicians can help dispell myths about employment of the handicapped. If the man can do the job, hire him.—R.B.K.



MISSISSIPPI POSTGRADUATE INSTITUTE IN THE MEDICAL SCIENCES

Jan. 18-22, 1971

CANCER CHEMOTHERAPY INTENSIVE COURSE

University Medical Center, Jackson

Jan. 18-22, 1971, beginning at 8 a.m.

Sponsored by The University of Mississippi School of Medicine postgraduate education committee, with the support of the Mississippi Postgraduate Institute in the Medical Sciences

Coordinators:

Warren N. Bell, M.D., professor of clinical laboratory sciences, chairman of the department, and associate professor of medicine, The University of Mississippi School of Medicine

G. D. Deraps, M.D., instructor in medicine, The University of Mississippi School of Medicine

In this one-week intensive course, participants will attend rounds, clinics, lectures, group discussions and case presentations. Emphasis will be on office screening, tumor diagnosis, natural history of disease and indications and treatment of various malignancies. Registration is limited to a class of five family physicians from the 40 enrolled in the Mississippi Postgraduate Institute in the Medical Sciences, which is funded by the Mississippi Regional Medical Program. Unlike the other intensive courses which will be offered twice

in the 1970-1971 series, cancer chemotherapy will only meet for one session.

CIRCUIT COURSES

SOUTHERN CIRCUIT

Biloxi—Jan. 6—Session 1, Howard Memorial Hospital, 6:30 p.m.

Hattiesburg—Jan. 7—Session 1, Methodist Hospital, 6:30 p.m.

Session 1—Peripheral Vascular Disease Arteriograms, Dr. Carlos Chavez
Surgical Approach, Dr. J. Harold Conn

SOUTHWEST CIRCUIT

McComb—Jan. 12—Session 2, Southwest Mississippi General Hospital, 7 p.m.

Session 2—Carcinoma of the Thyroid, Dr. Coupery Shands

Presentation and Diagnosis of Hypothyroidism and Hypoparathyroidism, Dr. Herbert G. Langford

FUTURE CALENDAR

November 30-December 4, 1970

NEUROLOGICAL DISEASES AND STROKE INTENSIVE COURSE

CARDIOLOGY INTENSIVE COURSE

December 7-11

NEPHROLOGY INTENSIVE COURSE

December 11

INFECTIONS IN OBSTETRICS AND GYNECOLOGY SEMINAR

January 6, 1971

CIRCUIT COURSE, BILOXI

January 7

CIRCUIT COURSE, HATTIESBURG

January 11-15

NEUROLOGICAL DISEASES AND STROKE INTENSIVE COURSE

January 12

CIRCUIT COURSE, McCOMB

January 18-22

CANCER CHEMOTHERAPY INTENSIVE COURSE

February 1-5

ELECTROCARDIOGRAPHY INTENSIVE COURSE

February 3

CIRCUIT COURSE, GULFPORT

February 4

CIRCUIT COURSE, HATTIESBURG

February 16

CIRCUIT COURSE, NATCHEZ

February 18

NEUROLOGY SEMINAR

February 23

CIRCUIT COURSE, COLUMBUS

March 1-5

GASTROENTEROLOGY, INTENSIVE COURSE

March 3

CIRCUIT COURSE, BAY ST. LOUIS

March 4

CIRCUIT COURSE, HATTIESBURG

March 5

RENAL SEMINAR

March 8-12

NEPHROLOGY INTENSIVE COURSE

CARDIOLOGY INTENSIVE COURSE

March 9

CIRCUIT COURSE, MERIDIAN

April 5-9

PEDIATRICS INTENSIVE COURSE

April 6

CIRCUIT COURSE, MERIDIAN

April 13

CIRCUIT COURSE, McCOMB

April 19-23

RADIOLOGY INTENSIVE COURSE

April 20

CIRCUIT COURSE, NATCHEZ

April 27

CIRCUIT COURSE, COLUMBUS

May 3-6

MISSISSIPPI STATE MEDICAL ASSOCIATION, BILOXI

May 11

CIRCUIT COURSE, MERIDIAN



PERSONALS

WILLIAM L. BASS, JR., a native of Laurel, has been appointed full-time director of the Coastal Mental Health Association.

TOM H. BLAKE of Jackson recently returned from a six-day bear and goose hunt to Naknek, Alaska.

PERSONALS / Continued

EDGAR E. BOBO of Jackson has been elected chief of staff at Rankin General Hospital for the coming year. Other new officers are CHARLES WILLIAMS, vice chief of staff; ROBERT RESTER, secretary; and ALLEN HOLLIS, Executive Committee member.

ALBERT E. BRELAND, JR., a native of Hattiesburg, has joined the staff of the Veterans Administration Center in Jackson. Dr. Breland is a graduate of the University of Mississippi School of Medicine and completed his internship and neurology residency there.

EUGENE A. BUSH of Laurel was named Alumnus of the Year of Jones County Junior College at recent homecoming activities at the college.

CARLOS M. CHAVEZ of Jackson has become a Fellow of the American College of Chest Physicians.

ROBERT D. CURRIER of Jackson and UMC presided over a meeting of the Central Society for Neurological Research in St. Louis recently. Dr. Currier is currently president of the society.

THOMAS H. GANDY of Natchez presented slides from his personal collection for a program on "Natchez Under the Hill" at the 15th annual Louisiana Art and Folk Festival in Columbia.

JACK C. HOOVER of Pascagoula announces the relocation of his office for the practice of obstetrics and gynecology to the Bel Air Shopping Center.

DON E. KILLELEA of Natchez was guest speaker at a recent meeting of American Legion Post No. 4. He spoke on care of mentally retarded children. Dr. Killelea also appeared on the program of the Annual Assembly of the Louisiana Academy of General Practice in New Orleans.

LEROY B. LAMM, director of the Gulfport-Biloxi VA Center, has been named director of the Veterans Administration's 10-state Southeastern Medical Region.

LYNDA G. LEE of Jackson and UMC was guest speaker at the October meeting of the Central Mississippi Chapter of Mississippi Medical Assistants. Her topic was medical genetics.

JOHN B. LEVENS, JR., of Bay St. Louis has been elected chief of staff of Hancock General Hospital. Other new officers are: M. L. DODSON, vice

chief of staff, and JOHN RUTHERFORD, III, secretary-treasurer.

J. HAMPTON MILLER, formerly of Jackson, announces the opening of his office at 2142 Commerce Street, Grenada, for the practice of obstetrics and gynecology.

FLOY JACK MOORE of Jackson, professor and director of the UMC television project, has been appointed representative to the Scientific Exhibit by the Section on Psychiatry and Neurology of the American Medical Association. In this capacity, he will coordinate all applications for scientific exhibits from the specialty field for AMA annual and clinical conventions.

WILLIAM H. PARKER of Heidelberg was installed as president of the Mississippi Academy of General Practice at the annual meeting in Biloxi. JAMES STEPHENS of Magee was named president-elect.

S. RAY PATE of Jackson has been certified by and is a Diplomate of the American Board of Psychiatry and Neurology.

BERNARD S. PATRICK of Jackson and UMC attended an October brain tumor symposium in Columbus, Ohio.

DONALD M. SHERLINE of Jackson and UMC participated in the District Four regional annual conference of the American College of Obstetricians and Gynecologists in Charleston, S. C. His paper was entitled "Methods of Relieving Pain During Delivery," and he also spoke on "The Choice of Anesthesia for Obstetric and Medical Complications."

VIRGINIA SMALL of Greenville has been named a Greenville Woman of Achievement during Business and Professional Women's Week.

C. D. TAYLOR, JR., of Pass Christian and chairman of the Legislative Council of the state medical association, spoke on the physician's place in politics to the Gulfport Medical Auxiliary recently.

WALTER TAYLOR of Clarksdale was guest speaker at the District Four meeting of the Mississippi Heart Association in Sumner. He discussed high blood pressure.

DAN R. THORNTON, JR., of Meridian attended the District Seven American College of Obstetricians and Gynecologists meeting in Mexico City. Dr. Thornton completed a five-year term as the section chairman for Mississippi and was elected treasurer of District Seven.

ANCEL C. TIPTON, ROBERT D. CURRIER, and ARMIN F. HAERER, all of Jackson and UMC's Division of Neurology, participated in a fall conference on epilepsy at the University of Southern Mississippi.

HENRY B. TYLER of Jackson was guest speaker at a recent Indianola Rotary Club meeting. He spoke on the latest techniques in cardiovascular surgery.

DAVID VAN LANDINGHAM of Jackson was guest speaker at a recent Mississippi Women's Cabinet on Public Affairs meeting. Dr. Van Landingham discussed his family's trip to Gaza, Israel, where they spent their vacation helping at the Baptist Hospital.

JAMES C. WAITES of Laurel has been elected to a three-year term on the Laurel Chamber of Commerce's Board of Directors.

L. D. WEBB of Calhoun City received the Calhoun City Chamber of Commerce's first Outstanding Citizen award for community service. Dr. Webb is mayor of the city, and is active in church and civic affairs as well as chief of staff of Hillcrest Hospital.

EUGENE F. WEBB of Itta Bena has been elected chief of medical staff of the Greenwood Leflore Hospital. Other officers elected were JOHN D. WOFFORD, assistant chief of staff; and J. V. FERGUSON, JR., secretary-treasurer. MILTON T. PERSON was elected to serve on the Executive Committee.

RAY WESSON of Ocean Springs has been named chairman of the Ocean Springs Hospital medical staff. HUGH BOYD is chairman-elect, and FRANK SCHMIDT is secretary-treasurer for the fiscal year which began Oct. 1, 1970.

CLARK WILLIAMS of Vicksburg has been elected president of the West Mississippi Medical Society. CHARLES MARASCALCO of Vicksburg is vice president, and M. E. HINMAN is secretary.

DEATHS

COWART, HIRAM BENJAMIN, M.D., Memphis Hospital Medical College 1912; died Sept. 30, 1970, age 88.

EBERHARD, JOHN JACOB, M.D., University of Tennessee College of Medicine 1931; in-

terned Knoxville General Hospital, Knoxville, Tenn., one year; Emeritus member of MSMA and AMA; died Oct. 22, 1970, age 70.

HIGHTOWER, CHARLES COUNCE, SR., M.D., Jefferson Medical College of Philadelphia 1910; interned South Mississippi Infirmary, McComb, Miss., 1910-1915; Emeritus member of MSMA and AMA; Past President of South Mississippi Medical Society; died Oct. 28, 1970, age 84.

MYERS, ONNIE PRESTON, M.D., Tulane University School of Medicine 1935; interned Southern Baptist Hospital, New Orleans, La., one year; urology residency, same, one year; Secretary of Central Medical Society 1953-1955; President of Central Medical Society 1956-1957; died Oct. 23, 1970, age 65.

STALLWORTH, WILLIAM LEA, M.D., Tulane University School of Medicine 1925; interned Touro Infirmary, New Orleans, La., one year; died Oct. 2, 1970, age 70.

NEW MEMBERS

ABRAHAM, RALPH ELLIS, Meridian. Born Meridian, Miss., June 22, 1940; M.D. University of Mississippi School of Medicine, Jackson, Miss., 1965; interned Parkland Memorial Hospital, Dallas, Tex., one year; surgery residency, University Medical Center, Jackson, Miss., July 1, 1966-June 30, 1970; elected Oct. 6, 1970 by East Mississippi Medical Society.

CANNON, CHARLES NEIL, Philadelphia. Born McDonald, Miss., June 12, 1924; M.D. University of Mississippi School of Medicine, Jackson, Miss., 1961; interned Duval County Medical Center, Jacksonville, Fla., one year; surgery residency, same, July 1, 1962-June 30, 1964; elected Oct. 6, 1970 by East Mississippi Medical Society.

DOWDY, BILLY GENE, Greenville. Born Hayti, Mo., Nov. 9, 1938. M.D. University of Tennessee College of Medicine, Memphis, Tenn., 1964; interned John Gaston Hospital, Memphis, Tenn., one year; radiology residency, Methodist Hospital, Memphis, Tenn., August 8, 1965-August 7, 1970; elected Oct. 14, 1970 by Delta Medical Society.

HURST, MARION FIELDON, Meridian. Born Henderson, Tenn., Oct. 14, 1938. M.D. University of Tennessee College of Medicine, Memphis,

NEW MEMBERS / Continued

Tenn., 1963; interned Pensacola Educational Program, Pensacola, Fla., one year; radiology residency, Ohio State University July 1, 1965-June 30, 1968; elected Oct. 6, 1970 by East Mississippi Medical Society.

LITTLE, THOMAS DALE, Meridian. Born Meridian, Miss., June 16, 1936. M.D. University of Mississippi School of Medicine, Jackson, Miss., 1962; interned Cincinnati General Hospital, Cincinnati, Ohio, one year; orthopedic surgery residency, Georgia Baptist Hospital, Atlanta, Ga., July 1, 1966-July 1, 1967 and January, 1968-January 1970; residency, Scottish Rite Crippled Children Hospital, Decatur, Ga. July, 1967-January, 1968 and January, 1970 to July, 1970; elected Oct. 6, 1970, by East Mississippi Medical Society.

WOOD, WILLIAM MARTIN, Meridian. Born Pittsboro, Miss., Nov. 8, 1924. M.D. University of Tennessee School of Medicine 1946; interned Southern Baptist Hospital, New Orleans, La., one year; neuropsychiatry residence, V. A. Hospital, Gulfport, Miss., March 1, 1965 to November 27, 1965; psychiatry residency, V. A. Hospital, Gulfport, Miss., January 14, 1966 to May 31, 1970; elected Oct. 6, 1970, by East Mississippi Medical Society.

Lilly Discontinues Manufacturing C-Quens

Eli Lilly and Company has announced that it has decided to discontinue manufacturing its oral contraceptive product C-Quens® and that it is advising the nation's physicians to transfer their patients using C-Quens to other means of fertility control in an orderly manner.

The company emphasized that there is no cause for patient alarm. Women taking C-Quens should continue until advised by their physicians on a change.

The reason for the action is that continuing, long-range studies have disclosed breast nodules in some beagles that had been given 10 and 25 times the human dose of the components of C-Quens. These nodules, none of which were malignant, resemble those that often occur in old female beagles and that are generally accepted to be benign.

The company emphasizes that these observations in dogs cannot be transposed directly to

human beings and that there is no evidence known to the company of any increase in the frequency of breast tumors in women using C-Quens.

The same kind of long-range studies in other laboratory animals—mice, rats, and monkeys—and eight years of clinical investigations in women support the safety of the drug.

Natchez School Offers Med Self-Help Course

Because of the large number of machines in use daily, Vocational-Technical School in Natchez is offering a "Medical Self-Help" course.

Though injuries from the machines are infrequent, Director Richard Fallin and others on the school staff felt the program was necessary.

Instructors for the 11-lesson course are: Julian White, Adams County Civil Defense Board; Mrs. Lee Newman, Jefferson Davis Hospital; Mrs. Yvonne Bertolet, Mrs. Betsy Wright, and Miss Joan Ainsworth, University of Southern Mississippi Resident Center Nurses Training; Ed Patton and Lt. Louis Gonnellini, Natchez Fire Department.

Purpose of the course is to provide knowledge and some skills in treating injuries and caring for the sick.

The "Medical Self-Help" training program is a cooperative effort of the Office of Civil Defense, U. S. Public Health Service, and the Council on National Security of the American Medical Association.

The use of "Medical Self-Help" techniques assumes that a physician or nurse may not be available for a relatively long period of time. First aid is based on professional care being soon available, in contrast.

The skills that the students learn, therefore, are to be applied under emergency conditions only. To aid in acquiring these skills, the students will have practice sessions following most of the lessons.

The 11 classes are divided into lessons on radioactive fallout and shelter; healthful living in emergencies; artificial respiration; bleeding and bandaging; fractures and splinting; transportation of the injured; burns; shock, nursing care of the sick and injured.

"The training learned at the Vocational-Technical School will enable students to care for themselves and others during school hours as well as away from school," Fallin commented.



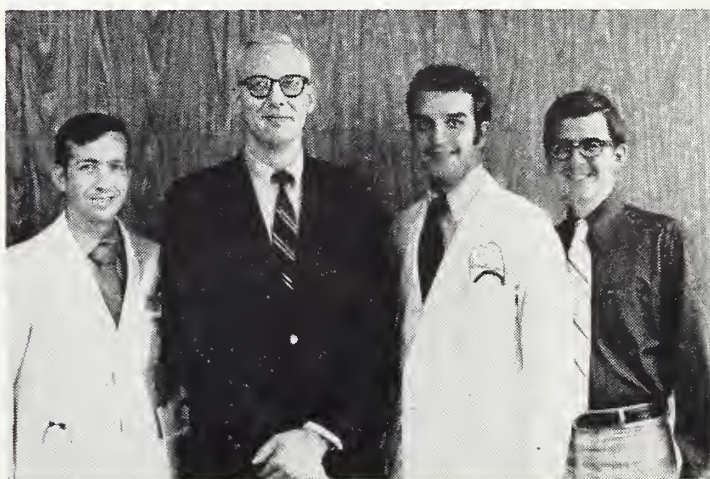
MSMA Membership Opened to UMC Upperclassmen, Will Have New Society

Third and fourth year students at the University of Mississippi School of Medicine will soon hold membership in the state medical association. A special committee of the Board of Trustees is working on organization with class officers and student representatives.

Action to authorize a degree of membership for medical students was approved by the House of Delegates at the 102nd Annual Session last May, according to Dr. Paul B. Brumby of Lexington, president of the association, and Dr. Mal S. Riddell, Jr., of Winona, chairman of the Board.

Members of the special committee working with the students are Drs. M. Beckett Howorth, Jr., of Oxford, chairman, Robert E. Blount of Jackson, and W. E. Moak of Richton. Dr.

Student leaders representing upperclassmen are Don Blackwood of Jackson, student body president; Baxter Irby, Jr., of Grenada, presi-



Student class officers confer with Dr. M. Beckett Howorth, Jr., of Oxford. From the left, Paul Welch, Dr. Howorth, Baxter Irby, Jr., and David Suttle.



President Paul B. Brumby, left, and Dr. Robert E. Blount, UMC dean, right, discuss medical student membership with Don Blackwood, UMC student body president.

Howorth is an association officer, Dr. Blount is acting dean and director of the University Medical Center, and Dr. Moak is a member of the Board of Trustees.

dent of the senior class; David Suttle of Jackson, vice president of the senior class; and Paul Welch of Laurel, vice president of the student body. Other class officers are serving on committees.

The action of the House of Delegates grew out of Resolution No. 8 at the May 1970 annual session. The resolution provides for a degree of dues-free student membership with a special component society for the group at UMC. The new unit will be provisionally chartered as the University Medical Society.

The juniors and seniors will conduct their own society affairs, including election of delegates to the annual session. The House action permits first and second year students to participate in SAMA, the Student American Medical Association chapter at UMC.

Student membership in state medical associations has been urged by AMA. Four state associations have created the new degree: Colorado and Kansas have chartered student societies along the lines contemplated in the Mississippi action, while Indiana and Pennsylvania have opened general voting membership to the students.

Association spokesmen said that student membership among state associations is growing, and it is anticipated that more than 25 states will implement a degree of voting membership during 1971.

Meridian Doctors Meet With Bar Association

Medical malpractice litigation and screening panels were main topics of discussion at the initial joint meeting of Lauderdale County physicians and the Lauderdale County Bar Association in Meridian recently.

Key participants were Drs. Frank H. Tucker, Jr., and Thomas Little and lawyers Walter Eppes and Gerald Adams.

Dr. Tucker led the program with a presentation on *res ipsa loquitur*, followed by discussion of the topic.

Those present discussed the Arizona county committee of doctors and lawyers which more or less arbitrates medical malpractice suits and determines whether suits have merit.

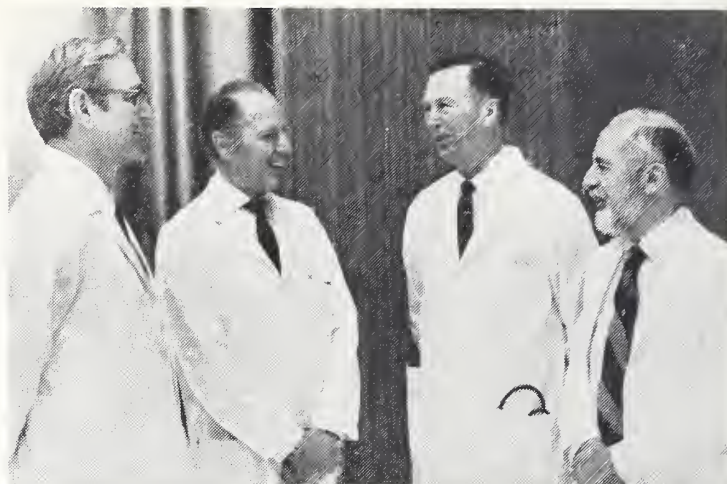
It was decided to form a similar screening committee in Lauderdale County. Three physicians were appointed to the committee: Drs. George Arrington, Joe Covington, and Billy Gillespie.

George Warner, chairman of the Lauderdale County Bar, appointed Eppes as representative of the defense lawyers and Adams as representative of the plaintiff lawyers.

The newly-formed committee was instructed to write the Arizona committee for guidelines in organization and activities.

In other program highlights, Eppes discussed the state statute on privileged communication and workmen's compensation. Dr. Little compared Mississippi malpractice rates to those of surrounding states, and Adams led the final discussion about medical reports.

Dr. Reid Speaks at Medical Center



Dr. H. Alistair Reid, senior lecturer and consultant physician, Liverpool School of Tropical Medicine, Liverpool, England, was guest speaker for Center Assembly at the University of Mississippi Medical Center. Dr. Reid, whose specialty is clinical tropical medicine, stopped to speak enroute from Thailand and Taiwan. Welcoming Dr. Reid, Dr. Thomas Brooks, professor of preventive medicine and chairman of the department, is at left; Dr. Robert E. Blount, acting director of the University Medical Center and acting dean of the University of Mississippi School of Medicine, is second right, and Dr. Hugh Keegan, professor of preventive medicine, is at right.

New Orleans Medical Assembly to Meet

The 34th annual meeting of The New Orleans Graduate Medical Assembly will be held March 8-11, 1971, with headquarters at The Roosevelt Hotel.

Nineteen outstanding guest speakers will participate and their presentations will be of interest to both specialists and general practitioners. The program will include 50 informative discussions on many topics of current medical interest, in addition to a clinicopathologic conference, medical motion pictures, roundtable luncheons, and technical exhibits. This program is acceptable for accredited hours by the American Academy of General Practice.

A program of entertainment for visiting ladies has also been planned.

For further information, contact Secretary, Room 1538, 1430 Tulane Avenue, New Orleans, La. 70112.



Book Reviews

Emergency Treatment and Management. By Thomas Flint, Jr., M.D. and Harvey D. Cain, M.D. 733 pages. Philadelphia: W. B. Saunders Company, 1970. \$11.50.

This volume on emergency treatment and management has been a main standby for physicians doing emergency work of any kind since its first publication in 1954. It contains a most conscientious review of all possible situations encountered by emergency personnel. This is its fourth edition and I believe it to be its best.

A special section is devoted to acute poisoning which includes a brief description of all types of poisons one might encounter, their antidotes, and treatments. This section is easy to read and the poison problem with which one is confronted can be quickly located.

It would be impossible to mention all of the areas this text covers, but I was very pleased with their writeup on tetanus and a proper immunization program. The indications for the use of tetanus toxoid and human tetanus immune globulin have been somewhat confusing in the past several years and this section was well done.

In addition to active emergency care, a section is provided on legal problems in emergency care which includes responsibilities of physicians in emergency cases, testimony in court, obligation of a physician as a witness, etc. All physicians in this type of work are coming more and more into contact with legal problems and this should prove most helpful to them. This again proves to be a valuable compilation for those doing emergency room care. It is recommended that it be available in all emergency room libraries.

R. J. FIELD, JR., M.D.

At Your Own Risk: The Case Against Chiropractic. By Ralph Lee Smith. 167 pages. New York: Trident Press, 1969. \$4.95. Paperback \$.95.

In this concise, easily read book, the author, an experienced medical journalist, presents the story of chiropractic.

Mr. Smith gives his purpose as "to set forth what a chiropractor is, what he believes, and what he does." The author covers these topics thoroughly beginning with the invention of chiropractic by an Iowa grocer, D. D. Palmer in 1886.

The book appears to be factual. The author's conclusions came from his own experiences with chiropractors and results of U. S. government (HEW) studies.

Especially interesting were the chapters on chiropractic use of x-rays and the lack of training in basic science and diagnostic skills found in graduates of schools of chiropractic.

In the chapter on gadgeteers, Mr. Lee goes into detail about the expensive gadgets chiropractors buy and use. Many have been confiscated by government officials as frauds. They actually have no therapeutic function, he points out.

The work is attractively presented by the publisher, and is highly recommended to all physicians who must tell their patients the true facts about the cult, as well as to the lay public who must keep informed in order to protect themselves.

NOLA P. GIBSON

ACS Inducts 19 State Physicians

Nineteen Mississippi physicians were among 1,551 surgeons inducted as new Fellows in cap-and-gown ceremonies during the annual five-day clinical congress of the American College of Surgeons.

New members from Jackson are Drs. Richard

C. Boronow, Carlos M. Chavez, Wafford H. Merrell, Jr., Bernard S. Patrick, Robert R. Smith, and Henry B. Tyler.

Other Mississippi initiates are Drs. Jerry R. Adkins of Biloxi, Richard L. Colson of Gulfport, Ernest J. Holder of Laurel, John E. Lindley and L. Vaughan Rush, Jr. of Meridian, Clyde H. Gunn, Jr., of Moss Point, Harvey C. Sanders of Mound Bayou, H. Van Craig and John R. Young, Jr., of Natchez, Perry J. Hockaday of Pascagoula, Robert D. Kirk, Jr., of Tupelo, and W. Briggs Hopson, Jr. of Vicksburg.

Lt. Col. Morris A. Schultz, USAF MC, of Keesler Air Force Base was also inducted.

Fellowship is awarded to those surgeons who fulfill comprehensive requirements of acceptable medical education and advanced training of surgery, and who give evidence of good moral character and ethical practice.

Med Technologists Get Postgraduate Training

Medical technologists in south Mississippi will receive extra training in four special sessions at the University of Southern Mississippi, which began Nov. 4, and will continue through January.

A test project which may be offered in other parts of the state, the refresher series was requested by the Mississippi State Society of Medical Technologists. It is part of the Mississippi Postgraduate Institute in the Medical Sciences, which is supported by the Mississippi Regional Medical Program. The University Medical Center and Mississippi State Medical Association were coapplicants for this project in 1969.

Each session will emphasize a different aspect of practical medical technology. Instructors will be registered medical technologists from the University of Mississippi Medical Center, Mississippi Baptist Hospital, Mississippi State Hospital at Whitfield and Coahoma County Hospital.

Late afternoon classes, two in November and two in January, allow participants to work in their respective laboratories a half-day, attend the course, and return home at a reasonable hour.

Miss Baptist Hospital Elects 1971 Officers

Dr. Noel C. Womack, Jr., chief of the medical staff of Mississippi Baptist Hospital in Jackson, has announced medical staff officers who will begin one-year terms Jan. 1, 1971. Dr. A. L. Meena is incoming chief of staff and Dr. R. P. Henderson is president-elect.

Dr. H. C. Ethridge will be vice-president, and Dr. J. O. Manning will serve as secretary of the staff in 1971.

Chiefs and assistant chiefs of the medical sections for 1971 are: surgery, Dr. L. R. Hodges, chief, and Dr. Louis A. Farber, assistant chief; medicine, Dr. Perrin L. Berry, chief, and Dr. G. B. Shaw, assistant chief; pediatrics, Dr. Wilfred Q. Cole, chief, and Dr. Cecil G. Jenkins, assistant chief;

Also, obstetrics-gynecology, Dr. Henry H. Webb, chief, and Dr. Charles M. Head, assistant chief; psychiatry, Dr. Bruce M. Sutton, chief, and Dr. H. A. Kroeze, assistant chief; and general practice, Dr. Charles N. Wright, chief, and Dr. J. P. Buckley, Jr., assistant chief.

All newly-elected officers are from Jackson.

Mental Health Facilities Are Studied

In the growing movement toward community-based care of the mentally ill, new relationships are developing between community mental health centers and state mental hospitals.

These relationships will be studied under a \$73,069 contract announced by Dr. Bertram S. Brown, director, National Institute of Mental Health.

The award to Socio-Technical Systems Associates, Boston, is part of NIMH's continuing appraisal of the national community mental health centers program.

"The analysis will seek to determine what working arrangements exist between centers and mental hospitals, and how these relationships affect the quality of services available to patients," Dr. Brown said.

Some community mental health centers and state mental hospitals are formal affiliates, while others have developed informal working arrangements. The researchers are to find out what political, administrative, and fiscal factors operate in each type of relationship, and what implications these factors have for the patient.

Comprehensive information about cooperation between state hospitals and mental health centers will be gathered from professional literature, site visit reports, grant applications, state plans, and other sources. Investigators will then survey all centers which have been in operation for at least six months.

Based on the information obtained, the relationships will be categorized into types, and a small sample of facilities within each category will receive concentrated attention.

Health Care Leaders Initiate Liaison

Continuing, high level liaison between the state hospital and medical associations has been initiated to strengthen mutual goals. This was the joint announcement of Lowery A. Woodall of Hattiesburg, president of the Mississippi Hospital Association, and Dr. Paul B. Brumby of Lexington, medical association president.

The health care organization leaders said that the first of a series of meetings has been con-

ducted "where we talked of almost every association activity with complete candor." They said that the conferences were also attended by the two chief executives of the associations, Charles W. Flynn of MHA and Rowland B. Kennedy of MSMA.

Mr. Woodall, who is executive director of the Forrest County Hospital, said that "we discovered more mutual goals than we imagined, and we recognized fully that hospitals and physicians have a large community of common interest in health and medical legislation."

Dr. Brumby agreed, adding that "our associations, working together, can achieve new objectives in serving the patient, which is the only reason for our respective existences."

Also agreed at the initial presidential conference was a plan for interorganization information exchange, including observers from one association to selected committee meetings of the other on an exchange basis.

Both Mr. Woodall and Dr. Brumby said that "a major effort will be made to seek parallels in legislative objectives during the 1971 Regular Session." Both leaders said that further meetings are planned.



Lowery A. Woodall, left, president of the Mississippi Hospital Association, confers with Dr. Paul B.

Brumby, MSMA president, at the first liaison meeting of the health care organization leaders.

Census Information Is Made Available

Information from the 1970 U. S. census useful in mental health planning will soon be made available to the states by the National Institute of Mental Health.

Using a system developed under a contract with the General Analytics Corporation of Bethesda, Md., the NIMH will be able to draw up profiles of state-designated mental health service, or "catchment," areas as a service to the states.

The profiles will be made by using Bureau of the Census statistics on population, socio-economic status, ethnic composition, household composition, and family structure, style of life, housing conditions, and other factors.

States requesting the profiles can, in turn, make the information available to community mental health centers, the planners of new centers, and other interested parties.

The states have already received from NIMH a prototype catchment area description for Dane County, Wisc., based on 1968 census pre-test data, to help them plan for usage of the 1970 statistics.

The profiles can be provided to the states in a variety of forms, including computer tapes and printed reports. Some of the materials will be free of charge, and others available at cost.

Questions about the profiles may be addressed to Dr. Charles Windle, Chief, Program Analysis and Evaluation Section, Division of Mental Health Service Programs, National Institute of Mental Health, 5454 Wisconsin Avenue, Chevy Chase, Md. 20015.

In a related service, the National Clearinghouse for Mental Health Information will offer researchers an experimental data retrieval service to answer questions involving catchment areas of more than one state. Requests for information retrieval can be addressed to Dr. Jon K. Meyer, Chief, National Clearinghouse for Mental Health Information, 5454 Wisconsin Avenue (WT), Chevy Chase, Md. 20015.

250 Students Attend Pre-Med Day



Nearly 250 students from some 23 senior and junior colleges and universities throughout the state came to the University of Mississippi Medical Center for a view of medicine in action in October. Surgery resident Dr. Robert A. Smith, right, of Heidelberg explains a heart assist device to, from left, Miss Pat Callicutt, pre-med advisor Glenn Bennett, Miss Patty Hardon, all of Northeast Junior College, and sophomore medical student James Balaski of Picayune.

Drs. Eisler and Ratliff Join UMC Faculty

Two new faculty members, Dr. Richard M. Eisler and Dr. Jack L. Ratliff, have joined the University of Mississippi School of Medicine teaching staff.

Dr. Eisler, who assumed his post in November, is assistant professor of psychiatry (psychology). He earned B.A. and M.A. degrees from Hofstra University and the Ph.D. degree from the State University of New York. Prior to his Mississippi appointment, Dr. Eisler was clinical psychologist, Crisis Intervention Service, Fort Logan Mental Health Center, Denver, Colorado.

Dr. Ratliff, surgery instructor and fifth-year thoracic surgery resident, received his M.D. degree from the University of Mississippi School of Medicine. His faculty position was effective in September.

SUBJECT INDEX

The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "N," News; "L," Letters to the Editor; the asterisk (*) indicates an original article in the JOURNAL, and the author's name follows the entry in brackets. "Deaths,"

"Personals," and "New Members" are indexed under the letters "D," "P," and "M" respectively.

Matter pertaining to MSMA is indexed under "Mississippi State Medical Association." For the author index see page 671.

A

Abortion

the next 90 days, decision on [Kennedy] 443-E
and the law [Kennedy] 335-E

Abraham, W. H., Jr.

installed as Fellow of American College of Obstetricians and Gynecologists, 143-N

Addie McBryde Memorial Rehabilitation Center for the Blind

construction begun on east wing of UMC, 529-N

Additives

Congress criticizes HEW's handling of cyclamate issue [Kennedy] 447-E

HEW and FDA, need to realign perspectives [Kennedy] 71-E

Ainsworth, Temple

named AUA president-elect, 405-N

Alcohol

writers have tendency to be alcoholics [Kennedy] 445-E

Alcoholic Hepatitis

review of 32 cases [McKell and Mora] *477

American Academy of Allergy

announces postgraduate course, 43-N

American Academy of General Practice

new project in medical communications, 619-N

takes new name, American Academy of Family Physicians, 623-N

American Academy of Ophthalmology and Otolaryngology

holds 75th annual session in Las Vegas, 571-N

American Academy of Orthopaedic Surgeons

publishes book on sports medicine, 619-N

American Board of Family Practice

gives second exam, 457-N

American Academy of Pediatrics

slates heart disease course, 608-N

American College of Cardiology

schedules 19th annual scientific session, 45-N

grants fellowship to Dr. James D. Hardy, 304-N

American College of Chest Physicians

southern chapter announces annual session, 576-N

announces 1971 Richman Essay Contest, 617-N

American College of Obstetricians and Gynecologists

installs Drs. Webb and Abraham as Fellows, 143-N

installs Drs. Hull and Henderson as Fellows, 302-N

American College of Physicians

plans gastroenterology course, 50-N
sponsors meet for Mississippi and Louisiana internists, 85-N

sets April course on physiology, 125-N

presents internal medicine course, 522-N

sponsors 5-day postgraduate course, 526-N

plans kidney disease course, 527-N

discusses health care issues, 530-N

slates genetics course, 568-N

sponsors neurology course, 576-N
holds scientific meeting in Atlanta, 614-N

American College of Surgeons

56th clinical congress to meet, 301-N

leadership in cancer programs [Kennedy] 507-E

American Council of Otolaryngology

opens headquarters, 137-N

inducts 19 state physicians, 659-N

American EEG Society

plans 1970 meeting, 146-N

sets continuation course, 198-N

American Heart Association

meeting features arteriosclerosis, 92-N

meeting reports development of artificial placentation system, 96-N

announces deadline for grants-in-aid, 571-N

plans 43rd annual scientific session, 568-N

American Medical Association

announces Sheen Award deadline, 128-N

Committee on Medicine and Religion and MSMA committee [Kennedy] 193-E

establishes specialty department, 126-N

1970-71 AMA-ERF campaign set, 572-N

inside story on membership [Kennedy] 119-E

Judicial Council plans ethics congress, 404-N

Medicredit: AMA's care delivery system [Kennedy] 69-E

president-elect is state native, 456-N

slates occupational health congress, 450-N

sponsors medical aspects of sports meet, 624-N

staff reorganizes, 452-N

American Pharmaceutical Association

seeks repeal of ant substitution laws [Kennedy] 561-E

American Psychiatric Association

salutes SKF remotivation project, 622-N

American Urological Association

Dr. Ainsworth is president-elect, 405-N

Amputation

in patients with peripheral vascular disease [Warren] *581

Anencephaly

in utero, roentgen diagnosis of [Levi] *554-RS

Anesthesia

related to maternal mortality in Mississippi [Sherline] *413

Appendectomy

data show it's safe [Kennedy] 71-E

Arrington, Lamar

retires from Blue plans board, 404-N

Arteriosclerosis

studied at AHA annual meeting, 92-N

task force plans for a 10-year research assault, 626-N

Artificial Limbs

Israeli develops artificial arm, 47-N

Arts Festival, Mississippi

involves doctors' wives, 134-N

Aspirin

may be prescription drug [Kennedy] 394-E

Auxiliary to MSMA

plans 1970-71 AMA-ERF campaign, 456-N

Aycock, W. J.

Robins Award winner looks back over 51 years of practice, 504

B

Barnett, William O.

named MAMA physician of the year, 362-N

Blood and Blood Banking

association holds annual meeting, 86-N

Blount, Robert E.

named UMC acting director and dean, 620-N

Blue Cross-Blue Shield

promotes Max Gilliland, 139-N

Dr. Arrington retired from board, 404-N

Book Reviews and Books Received

Adams, John P.: Current Practices in Orthopaedic Surgery [Thompson] 199

American Academy of Orthopaedic Surgeons: Symposium on Sports Medicine [Rush] 35

Brainerd, H., Krupp, M. A., Chatton, M. J., and Margen, S.: Current Diagnosis and Treatment [Dill] 282, 613

Daniel, W. A., Jr.: The Adolescent Patient, 518

Duke-Elder, Sir Stewart: The Practice of Refraction, Ed. 8 [Blount] 35, 281

Egan, Donald F.: Fundamentals of Inhalation Therapy [Campbell] 36, 341

Ellis, Philip P., and Smith, Donn L.: Handbook of Ocular Therapeutics and Pharmacology [Rogers] 36, 341

Flint, Thomas, Jr., and Cain, Harvey D.: Emergency Treatment and Management, Ed. 4 [Field] 518, 659

Gaisford, John C.: Symposium on Cancer of the Head and Neck—Total Treatment and Reconstructive Rehabilitation [Shands] 282, 453

Georgiade, Nicholas G.: Plastic and Maxillofacial Trauma Symposium [Harthcock] 128

Hepner, James O., Boyer, John M., and Westerhaus, Carl L.: Personnel Administration and Labor Relations in Health Care Facilities [Clover] 282, 453

Jaffe, Norman S.: The Vitreous in Clinical Ophthalmology [Buckley] 282, 573

Kirklin, John W., and Karp, Robert B.: The Tetralogy of Fallot From a Surgical Viewpoint, 518

McLennan, Charles E.: Synopsis of Obstetrics, Ed. 8, 282

Moore, Condict: Synopsis of Clinical Cancer, Ed. 2, 282

Moritz, Alan R., and Morris, R. Crawford: Handbook of Legal Medicine [Kennedy] 517

Moss, Bernice R., Southworth, Warren H., and Reichart, John L.: Health Education, 36

Muehrcke, Robert C.: Acute Renal Failure: Diagnosis and Management [Hatten] 36, 613

Nose, Yukihiro: Manual on Artificial Organs, Vol. 1, The Artificial Kidney [Bower] 199

Reisman, Leonard E., and Matheny, Adam P., Jr.: Genetics and Counseling in Medical Practice [Jackson] 35

Smallpiece, Victoria: Urinary Tract Infection in Childhood and Its Relevance to Disease in Adult Life [Alvis] 281

Smith, J. Ned, Jr., and Lee, Kyo R.: Essentials of Gastroenterology [Marascalco] 127

Smith, Philip: Arrows of Mercy, 36

Smith, Ralph L.: At Your Own Risk: The Case Against Chiropractic [Gibson] 659

Solomon, Philip, and Patch, Vernon D.: Handbook of Psychiatry [Wilson] 282, 573

Stephenson, Hugh E., Jr.: Cardiac Arrest and Resuscitation [Tyler] 36, 517

Stone, James H.: Crisis Fleeting [Blount] 281, 403

Texter, E. Clinton, Jr.: Physiology of the Gastrointestinal Tract [Mora] 77

Urry, D. W.: Spectroscopic Approaches to Biomolecular Conformation, 518

Wilson, Charles C., and Avery, Elizabeth: Healthful School Environment, 518

Winokur, G., Clayton, Paula J., and Reich, Theodore: Manic Depressive Illness [McKinley] 281, 403

Young, Clara G., and Barger, James D.: Introduction to Medical Science [Burman] 77

Brumby, Paul B.
Dr. Brumby Day held in Lexington, 618-N
honored by Holmes County Community Hospital Board, 528-N

Business Consulting
becomes a profession, 90-N

Butler, Frank L., Jr.
named to MSMA Committee on Publications, 301-N

Button Power
teenage style [Kennedy] 512-E

C

Cancer: See Neoplasms
program of American College of Surgeons [Kennedy] 507-E
cancer quiz, 17, 133
genetic aspects in humans [Jackson] *365

Carcinoma
management of early invasive carcinoma of the cervix [Hickman and Gibson] *253

CARE-SOM
new dimensions in emergency medical rescue services [Shell et al] *257

Cardiology
medical textbook published, 84-N
pacemaker management of heart block [Bowlin] *309
course offers teacher-training, 457-N

Cardiovascular Disease
idiopathic hypertrophic subaortic stenosis [Hatten] *106

Cardioversion
direct-current with Diazepam as sedative agent [Rosenblatt and Nettles] *57

Carter, Robert E.
resigns as UMC dean and director, 527-N
honored at UMC reception, 617-N

CBS
produces documentaries jaundiced against medicine [Kennedy] 336-E

Census
information is available, 662-N

Central Medical Society
elects new officers, 98-N

Cervix

early invasive carcinoma of [Hickman and Gibson] *253

Chemoprophylaxis

for prevention of tuberculosis in Mississippi [Reid] *485

Chicago Medical Society

sets two postgraduate courses, 622-N

Chiropractic

Sen. Eastland sponsors bill to include services under Medicare [Kennedy] 607-E

Clinicopathological Conference

XCVI [Brent and Schiesari-Mississippi Baptist Hospital] 262

CHP, Division of

study would consolidate state agencies and abolish State Board of Health, 615-N

Contraceptives, Oral

Sen. Nelson's hearings on pill complications [Kennedy] 276-E

Coronary Care Units

UMC unit nears completion, 574-N

Coronary Disease

surgery on coronary artery course set, 456-N

Corporations, Professional

governor signs bill into law [Kennedy] 191-E

C-Quens

Lilly discontinues making, 656-N

Cyclamates

Congress criticizes HEW's handling of issue [Kennedy] 447-E

D

Deaths

Armstrong, G. G., Sr., 32
Cannon, Russell H., 280
Cooke, James K., 197
Coward, H. B., 655
Cowser, Louis E., 339
Dean, Sara R., 448
Eberhard, J. J., 655
Fox, James H., 124
Grant, Roy G., 518
Graves, Z. B., 399
Green, James C., 76
Hightower, C. C., Sr., 655
McDougal, Luther L., 76
Moore, Wallace C., Jr., 399
Myers, O. P., 655
Otken, Luther B., Sr., 32
Pitchford, Ruth D., 197
Raney, Daniel H., 32
Robertson, M. H., 280
Stallworth, W. L., 655
Suttle, Thomas C., 76
Towns, Sherrod R., 568
Trudeau, Eugene A., 339
Wingo, Oliver B., 125

Dental Care

need for more insurance coverage [Kennedy] 510-E

Diabetes Association of Mississippi

reorganized to include lay members, 282-N

Dialysis

home training unit established at UMC, 454-N

in cases of poisoning [Bower and Hume] *639

Disasters
 medical response to Camille evaluated, 45-N
 State Board of Health commended for service after Hurricane Camille, 80-N
Drug Abuse
 much new legislation introduced [Kennedy] 393-E
 exhibit is available, 522-N
 and youth [Guernsey] *585
Drug Dependence
 study published by NIMH, 81-N
Drug Industry
 Rx for inflation and drug costs [Kennedy] 509-E
Drugs
 and youth [Guernsey] *595
 Ole Miss develops insect sting drug, 140-N

E

Eastland, Sen. James O.
 helps chiropractors [Kennedy] 607-E
Education, Medical
 UAB announces 3-year M.D. program, 620-N
Egeberg, Roger O.
 calls for public, private aid, 92-N
Eisler, Richard M.
 joins UMC faculty, 662-N
Emergencies
 surgical, of the newborn [Miller] *585
Emergency Department, Hospital
 guidelines to increase efficiency [Milam] *61
Emergency Rescue Service
 CARE-SOM, new dimensions in [Shell, et al] *257
Endometriosis
 an unusual cause of colon obstruction [Colbert] *502
Ethics, Medical
 AMA Judicial Council plans 3rd national congress, 404-N
 changing methods and changeless principles [Keller] *110
Exceptional Parent Magazine
 new magazine for parents of children with disabilities, 576-N

F

Family Planning
 State Board of Health reports on project, 88-N
 project serves four counties, 450-N
Family Practice Specialist
 medicine's new man [Kennedy] 273-E
Field Memorial Hospital
 installs modular lifeguard system, 527-N
Flying Physicians Association
 meet in Canada, 409-N
Food and Drug Administration
 warns against Bard Urethral Catheters, 36-N
 Upjohn gains right to argue against, 42-N
 Pfizer comments on recall, 78-N

G

Gastrointestinal Lesions
 role of potassium therapy [Emerson] 321
Genetics
 and inherited human cancer [Jackson] *365
 ACP course slated for November, 568-N
Gettysburg Commission
 headed by M.D., 360-N
Gilliland, Max
 promoted by Blue plans, 139-N
Grimes, D. A.
 named UMC hospital director, 406-N

H

Hall, Wesley W.
 AMA president-elect and state native, 456-N
Handicapped, The
 AMIA supports employment of the handicapped [Kennedy] 652-E
Hardy, James D.
 awarded ACC fellowship, 304-N
Health
 leaders meet in Washington, 299-N
Health Care Delivery
 Jackson chamber honors health care team [Kennedy] 26-E
 Medcredit, AMA's plan for care delivery [Kennedy] 69-E
Henderson, W. H.
 installed as Fellow of American College of Obstetricians and Gynecologists, 302-N
Heart Attack
 studied at Alabama Medical Center, 97-N
Heart Block
 pacemaker management of [Bowlin] *309
Heart, Booster System
 unveiled by NHI, 91-N
Hematology
 problems in the newborn [Pullen and Smith] *543
Hepatitis
 acute alcoholic-review of 32 cases [McKell and Mora] *477
Hijacking
 and health insurance [Kennedy] 651-E
Hill-Burton Act [Hospital Survey and Construction Act]
 durability of the program [Kennedy] 446-E
Hill, Stanley A.
 named delegate to AMA, 402-N
Homicide
 increases in the United States [Kennedy] 394-E
Hospitals
 guidelines to increase efficiency of emergency department [Milan] *61
 cost dilemma of services [Kennedy] 277-E
 Field Memorial gets lifeguard system, 527-N
Hughes, Sen. Harold E.
 ungrateful liberal [Kennedy] 511-E

Hull, Calvin T.
 installed as fellow of American College of Obstetricians and Gynecologists, 302-N
Hypnosis
 new seminar offered at Mississippi State University, 449-N

I

Immunization
 program now financed by State Board of Health, 454-N
Infants, Newborn
 recent advances in care of [Brann] *327
 resuscitation of (Smith and Brann) *417
 bacterial infections in [Wright and Brann] *493
 hematologic problems of [Pullen and Smith] *543
 surgical emergencies in [Miller] *585
Infection, Bacterial
 in the newborn [Wright and Brann] *493
Instruments, Microsurgical
 new line introduced, 523-N
Insurance, Health
 and hijacking [Kennedy] 651-E
 need for more dental care coverage [Kennedy] 510-E
 executives combat rising costs, 93-N
 four faces of national health insurance [Kennedy] 647-E
Insurance, Professional Liability
 House Bill 407 threatens low premiums [Kennedy] 118-E
Internal Revenue Service
 sends cards explaining 1040, 80-N
 pre-addressed labels speed returns, 128-N
 early filing speeds up returns, 145-N
International College of Surgeons
 schedules 17th congress in Paris, 130-N
 schedules 3rd western hemisphere congress, 530-N
 3rd western hemisphere congress to meet in Las Vegas, 616-N
Inversion, Uterine
 case report XIV of Maternal Mortality Study [Nassar] *541

J

Jenkins, W. N.
 honored for 50 years of service, 572-N
Joint Commission on Accreditation of Hospitals
 growing role [Kennedy] 650-E

K

Kidney
 ACP sponsors course on renal diseases, 527-N
Kidney, Artificial
 in acute renal failure [Bower] *317
 use of in cases of poisoning [Bower and Hume] *639

L

Lakeland Graduate Medical Assembly
schedules Frontiers of Medicine 1970, 36-N

Lampton, T. D.
named RMP director, 647-N

Language
Memphis psychiatrist publishes Now 70's Dictionary [Kennedy] 561-E

Leathers, Waller S.
portrait donated to UMC, 622-N

Legislation
is everybody's crisis [Kennedy] 389-E
new beefed-up MSMA program to ask aid of all members, 569-N
punitive bill aimed at physicians [Kennedy] 118-E

Letters to the Editor
Rubella lecture at Mississippi State University [Ricks] 76-L

Liability
without negligence, Illinois State Supreme Court decision [Kennedy] 607-E

Lifeguard System
Field Memorial Hospital installs modular system, 527-N

Eli Lilly and Company
discontinues manufacturing C-Quens, 656-N

Linton, Patrick H.
named new psychiatry chief at Alabama, 132-N

Long, Lawrence W.
receives ICS award, 85-N

Lotterhos, William E.
becomes president of AAGP, 623-N
discusses new AAGP program, 619-N

M

Magnuson, Harold J.
receives IMA Knudsen award, 292-N

Marihuana: See also Drug Abuse
grown by Ole Miss School of Pharmacy, 84-N
bibliography published by Ole Miss School of Pharmacy, 621-N

Maternal Mortality
related to anesthesia in Mississippi [Sherline] *413
case report XIV of study [Nassar] *541

McCaskill, Luther W.
acquitted of abortion murder, 136-N
charges against dropped, 302-N

McCleave, Rev. Dr. Paul D.
appears before MSMA Committee on Medicine and Religion and UMC, 40-N

M. D. Anderson Hospital
plans cancer rehabilitation conference, 574-N

Measles
Rubella campaign gets good results, 43-N

Meat, Synthetic
meatless meat developed [Kennedy] 193-E

Medicaid
in Mississippi: a bare bones beginning [Kennedy] 23-E
Alabama qualifies Mississippi physicians, 132-N
more regulations announced, 135-N
Greene County screened, 280-N

Medicare
increases hospital deductibles, 84-N
more regulations announced, 135-N
four M.D.'s indicted for fraud, 143-N
Part 1-B [Kennedy] 275-E
Part C [Kennedy] 387-E

Medicredit: See also American Medical Association
AMA's plan for national health insurance [Kennedy] 69-E

Medical Care Foundations
private delivery that works [Kennedy] 557-E

Medical Careers
corpsmen, new manpower tool [Kennedy] 276-E

Medical Ethics
changing methods and changeless principles [Keller] *110

Medical Organization: See also specific titles such as American Medical Association, Mississippi State Medical Association
medicine for the 70's [Royals] *374

Medical Science
changing methods and changeless principles [Keller] *110

Medical Services
cost more today [Kennedy] 337-E

Medihc
new manpower tool [Kennedy] 276-E

Members, New
Abraham, Ralph E., 655
Barry, Esther Garcia, 568
Bennett, Kenneth R., 125
Blaylock, Darrell N., 339
Cannon, Charles N., 655
Chavez, Carlos Manuel, 76
Cockrell, Marion E., Jr., 125
Collins, Rex W., 125
Collins, Ted Zanny, 516
Day, Larry H., 339
Dowdy, B. G., 655
Durfey, A. P., Jr., 279
Ederington, John B., 125
Evers, Carl G., 399
Fulcher, Luther H., Jr., 125
Gifford, W. B., 279
Giles, William G., 339
Goodlow, William H., Jr., 125
Gore, Edward K., 279
Hamernik, R. J., 279
Hammett, Larry J., 339
Hartness, Durward S., 339
Hickerson, Otrie B., 125
Hoover, Jack C., 339
Humphrey, Charles R., Jr., 568
Hurst, Marion F., 655
Kliesch, William F., 399
Kobs, Darcey Gus, Jr., 516
Lewis, Fredric A., 448
Little, Thomas D., 656
Lynch, W. F., Jr., 279
McFadden, J. W., 279

Miller, Richard Charles, 197
Mitchell, Larry Morris, 516
Owens, L. J., 612
Ozborn, C. A., 280
Pandey, Shanti, 568
Rester, Robert Raymond, 197
Richardson, Travis Quitman, 516
Scott, Edward G., Jr., 339
Smith, Jimmie L., 339
Speck, James W., 197
Sprabery, Archie P., 197
Vesa, Antonio Gregori, 568
Walden, Thomas B., 197
Walker, B. L., 280
Ward, Roderick D., Jr., 339
White, Ellison F., 197
Wilder, S. J., Jr., 280
Wood, William M., 656

Mental Health
facilities are studied, 660-N
Meridian gets center, 523-N

Meridian
physicians and lawyers meet, 658-N

Microfiche Camera
new low cost table top model, 529-N

Mississippi Association of Medical Assistants
Dr. Barnett named MAMA physician of the year, 362-N
Mrs. Pace named AAMA trustee, 43-N

Mississippi Baptist Hospital
elects 1970 officers, 78-N
elects 1971 officers, 660-N

Mississippi Heart Association
holds annual assembly, 291-N
breaks ground for headquarters building, 406-N
offers CPR faculty training course, 457-N
announces 1971-72 research grants and fellowships program, 618-N

Mississippi Hospital Association
elects officers, 455-N
meets with MSMA leaders, 661-N

Mississippi Jaycees
collect drug samples for Vietnam, 282-N

Mississippi Regional Medical Program
awards cardiopulmonary grant, 29-N
Dr. Lampton is named director, 447-N
expands activities, 41-N

Mississippi State Board of Health
and UMC set up neurological clinics, 42-N
commended by USPHS, 80-N
crippled children's service transferred [Kennedy] 390-E
Dr. Mitchell named director of local health services, 452-N
family planning project serving four counties, 450-N
Greene County screened for Medicaid, 280-N
Hinds County children immunized against Rubella, 362-N
Mr. Whitaker selected for study, 457-N
now finances immunization programs, 454-N
reports on family planning project, 88-N

Rubella campaign gets good results, 43-N
 sponsors radiological courses, 407-N
 studies simultaneous vaccinations, 126-N
 three appointed by governor, 361-N
 warns about animal bites, rabies, 78-N
 would be abolished in CHP (PMM) plan, 615-N
Mississippi State Medical Association
 auxiliary plans 1970-71 AMA-ERF campaign, 456-N
 beefed-up legislative program to ask aid of all members, 569-N
 Board of Trustees—new officers, 361-N; sets 102nd Annual Session for May 11-14, 129-N
 building addition opened, 283-N
 Central Medical Society—elects officers, 98-N
 commended by state House of Representatives, 282-N
 Committee on Medicine and Religion—complete care of whole man [Kennedy] 193-E; MSMA and UMC hear AMA's Dr. McCleave, 40-N
 Constitution and By-Laws, 378
 economic asset of membership [Kennedy] 559-E
 Committee on Publications—Dr. Frank L. Butler, Jr., appointed, 301-N
 governor signs professional corporations into law, 304-N
 headquarters addition formal opening set by Board of Trustees, 79-N
 Hill, Stanley A., is new AMA delegate, 402-N
 House of Delegates—handbook of 102nd Annual Session, 187; news report on proceedings, 347-N; text of proceedings, 427-N
 102nd Annual Session—official call and program, 163; Dr. Brumby inaugurated president. Dr. Brown named president-elect, 343-N
 103rd Annual Session—scientific assembly begins work, 358-N; scientific assembly begins work and invites exhibits, essays, 451-N
 1970 Directory mailed, 86-N
 membership opened to upperclass UMC students, 657-N
 new membership service to itemize dues initiated, 519-N
 newsletter gets facelifting [Kennedy] 25-E
 President's Page, Royals—'Needed Now,' 22; 'Best Part of the Job,' 68; 'Or Lose by Default,' 116; 'Continuum of Crisis,' 190; 'Past and Future: The Task Ahead,' 272
 President's Page, Brumby—'Changes and Challenge,' 334; 'The Making of an M.D.,' 386; 'Our Medical Democracy,' 442; 'Dilemma in Blue,' 506; 'Growing Pains,' 556; 'A Busted Play,' 602; 'LPN's Fight Drug Abuse,' 646

Robins Award, W. J. Aycock is recipient, 349-N
 Wiygul, Frank M., Jr., named section officer, 143-N
Mississippi State University
 announces seminar in hypnosis, 449-N
 Mitchell Lectures feature Dr. Cooper, 39-N
Mississippi Thoracic Society
 holds annual meeting, 301-N
 new officers, 405-N
Mississippi Tuberculosis and Respiratory Disease Association
 Dr. Tate is guest speaker, 304-N
Mitchell, J. Daniel
 is UM alumni president-elect, 455-N
Mitchell, Shelby W.
 named director of local health services of State Board of Health, 452-N
Mound Park Hospital Foundation
 schedules postgraduate courses, 85-N
Myeloma
 multiple or plasma cell [Blount] *268-RS
Myocardial Infarction
 Alabama sets up study centers, 97-N
 emergency surgery for [Timmis et al] *101

N

Narcotics
 the old admonition [Kennedy] 120-E
National Health Insurance
 four faces of [Kennedy] 647-E
Natchez Vocational-Technical School
 offers medical self-help course, 656-N
National Institutes of Health
 meets with task force on arteriosclerosis, 626-N
National Heart and Lung Institute
 establishes specialized research centers, 626-N
 works with task force on arteriosclerosis, 626-N
Neurological Disorders
 syringomyelia in Mississippi [Tipton and Haerer] *533
Newborn Care
 Seminar I, Recent Advances in [Brann] *327
 Seminar II, Resuscitation of [Smith and Brann] *417
 Seminar III, Acute Bacterial Infections in [Wright and Brann] *493
 Seminar IV, Newborn Hematologic Problems [Pullen and Smith] *543
 Seminar V, Surgical Emergencies in [Miller] *585
 UMC adds nursery and intensive care unit, 530-N
New Orleans Graduate Medical Assembly
 holds 33rd annual meeting, 88-N
 sets 34th annual assembly, 658-N
NORC
 4th study on health care and cost [Kennedy] 605-E

Nursing
 mandatory licensure for Mississippi [Kennedy] 605-E
 master's degree offered at UMC, 624-N

O

Obstetrics
 and gynecology, practical uses of steroids and gonadotropins [Buttram et al] *1
 prevention of maternal Rh sensitization: anti-Rh immune globulin [Wilson] *53
Ophthalmology
 management of posterior segment intraocular foreign bodies [Goldberg] *149
Overland Terrain Vehicles
 can be dangerous [Kennedy] 73-E

P

Pace, Mrs. Thomas D., Jr.
 named AAMA trustee, 43-N
Panama
 Panama Limited discontinued [Kennedy] 606-E
Peer Review
 in Mississippi [Kennedy] 603-E
Pegram, G. Vernon, Jr.
 studies sleep problems at UAB, 614-N
Peripheral Vascular Disease
 amputations in patients with [Warren] *581
Personals
 Abide, John K., 278, 448, 513
 Adkins, Jerry R., 570
 Allard, George, 278
 Allen, Raymond A., 570
 Allison, James W., 448
 Amacker, Dempsey T., 337, 611
 Atwood, John G., 278
 Aycock, W. J., 611
 Bailey, James W., 513
 Bailey, S. Lamar, 513, 570
 Baird, Frank, 513
 Ball, David A., 513
 Ball, Ottis G., 278
 Banahan, B. F., Jr., 449
 Barnes, G. Spencer, 75, 278, 516
 Barnett, Jim, 75, 513
 Barnett, William O., 30
 Bass, William L., Jr., 653
 Batson, Blair E., 30
 Beacham, A. V., 397, 448
 Benefield, T. E., Jr., 612
 Bennett, Kenneth R., 570
 Berry, Sidney R., 516
 Biles, G. Lacey, 30, 397
 Blake, Tom H., 653
 Blake, Thomas M., 570
 Blakey, Durward, 75
 Blissard, Thomasina, 337
 Blount, Robert E., 30
 Bobo, Edgar E., 654
 Bobo, William B., 196
 Boggess, Julian E., 570
 Boggs, Julian E., Jr., 338
 Booth, J. E., 75
 Boren, F. C., 278
 Boswell, Hugh P., Jr., 513
 Bouchillon, C. D., III, 124
 Bounds, L. H., 30, 123
 Bower, John D., 30

Boyd, Hugh L., 448, 655
 Bramlett, E. V., 570
 Bramlett, Julian, 338
 Brann, A. W., Jr., 612
 Breland, A. E., Jr., 654
 Brock, Ralph H., 30
 Brooks, Tommy, 196
 Browning, Raymond W., 30
 Brumby, Paul B., 30, 123, 278
 Buckley, Theresa L. R., 278, 612
 Burgess, Duane C., 123, 338
 Burman, R. G., 278
 Bush, Eugene A., 654
 Caldwell, R. E., 513
 Caldwell, Robert S., 196
 Caldwell, W. E., 513
 Cannon, Charles N., 123, 196
 Carney, P. Temple, 123, 397
 Carter, David K., 513
 Carter, Robert E., 30, 123, 196
 Carruth, E. L., 612
 Catchings, Charles E., 448
 Caruther, S. B., 513
 Cavett, James R., Jr., 513
 Chase, Vernon A., 513
 Chavez, Carlos M., 654
 Clark, Howard D., 278
 Clark, L. J., Jr., 278
 Cleveland, C. Hal, 30, 338
 Clippinger, D. L., 75, 513, 612
 Cobb, Alton B., 30, 338, 612
 Cockrell, Marion E., 123, 448
 Conerly, Dawson B., Jr., 397
 Conner, Douglas L., 448
 Cook, Gaines L., 30
 Copeland, Clyde X., Jr., 123
 Cotten, Milam S., 513
 Cottrell, Hugh B., 30, 196, 570
 Covington, Joe S., 123
 Cox, Charles J., 338
 Craig, Harris V., 448
 Crawford, J. P., 75
 Crawford, Walter, 30, 570
 Criss, Ralph J., Jr., 397
 Crosthwait, James L., 570
 Crowson, William N., 448
 Culpepper, J. P., Jr., 75
 Currier, Robert D., 123, 654, 655
 Davis, John R., 513
 Dodson, M. L., 654
 Donald, Robert L., 30, 448
 Doster, James T., 196, 278
 Downer, John, 278
 Draughn, D. H., 612
 Durfey, A. P., 278
 Durfey, A. P., Jr., 278
 Durfey, John R., 278
 Easterley, C. E., 397
 Eggerton, William E., 30
 Ehrich, Melvin, 75
 Ellis, Ernest E., 338
 Eure, W. R., 397
 Fabian, Leonard W., 448
 Ferguson, J. V., Jr., 655
 Ferrington, Elizabeth, 278
 Field, R. J., Jr., 612
 Flechas, Enrique, 449, 612
 Flowers, William M., 196
 Folk, Ben P., 75
 Frye, Harry C., Jr., 75, 278
 Fulcher, Luther H., 278
 Gabbert, Elmo P., 448
 Gaddy, Ira E., Jr., 30
 Gandy, Thomas H., 338, 654

Garrett, E. S., Jr., 448
 Gary, William A., 196
 Gates, R. F., 30
 Gates, William C., 513
 Gatling, Robert R., 570
 Giffin, James R., 123
 Gilbert, Wendell N., 75, 278
 Giles, Hannelore H., 30
 Gillespie, Guy T., Jr., 123, 196
 Gillespie, H. Lamar, 278
 Godfrey, William E., III, 196
 Grabowski, Stanislaw, 123
 Green, Earl W., 513
 Green, George, 75
 Green, John E., 513
 Grenfell, Raymond F., 30
 Guyton, Arthur C., 30
 Haerer, A. F., 123, 448, 655
 Hale, Carl R., 30, 196
 Hardy, James D., 123
 Harrington, John N., 278
 Harris, Elmer J., 278
 Hatten, Karl W., 123, 338, 570, 612
 Hawkins, Mary E., 278
 Hays, Arthur V., 338
 Hays, James C., 397, 570
 Hays, Martha, 123
 Hedgewood, Henri M., 123
 Hellems, Harper K., 30
 Henderson, Robert P., 278
 Hendrick, James G., 30, 448
 Hendrix, James H., Jr., 279
 Henneberger, George, 448
 Herring, Emmett, 513
 Hiatt, Warren A., 75
 Hicks, G. Swink, 30
 Hilbun, Ben M., 612
 Hinman, M. E., 655
 Hogan, Marcus, 278
 Holleman, Henry, 513
 Hollingshead, C. A., 338, 397
 Hollingsworth, Elizabeth, 516
 Hollingsworth, J. W., 448, 570
 Hollis, Allen, 654
 Holmes, Verner S., 124
 Hoover, Jack C., 123, 654
 Hopkins, Gerald, 30, 123
 Horn, Paul L., Jr., 30
 House, J. R., Jr., 612
 Howard, Anse B., III, 571
 Howell, John B., Jr., 338
 Howell, Leroy, 76, 449
 Howell, T. R., 338
 Hutchinson, Richard G., 30
 Iles, Jerry W., 30
 Irby, Oscar W., 338
 Ireland, Robert, 75
 Jaquith, W. L., 30, 338, 612
 Jenkins, W. N., 513
 Jeter, Marvin H., 570
 Jobe, Louis H., 397
 Johnson, Ben B., 449
 Johnson, Richard, 124
 Jones, Edley, Sr., 124
 Kaplan, Jerry, 76
 Keel, Dan T., Jr., 279
 Killelea, Donald E., 196, 654
 Kimbrough, George T., 570
 Kirk, Andy E., 76, 449
 Kliesch, Nancy L., 397
 Kliesch, William F., 570, 612
 Knox, I. C., Jr., 338
 Kuljis, Joseph, 612

Laird, Earl L., 513
 Lake, Wesley W., 338
 Lamb, Woodrow, 513
 Lamm, Leroy B., 654
 Landry, V. E., 397
 Lane, Dewey H., Jr., 124, 279, 570
 Lane, John T., 397
 Langford, Herbert G., 30, 449
 Lee, A. Eugene, 513
 Lee, Mary Alice, 196
 Lee, Lynda G., 654
 Lee, Ray, 124
 Lehmann, Louis C., 196
 Levens, John B., Jr., 654
 Lewis, Fred A., 278
 Lewis, Henry L., III, 75
 Lingle, Jerry, 513
 Little, Gerald M., 397
 Little, Thomas D., 513
 Lockard, Blanche, 75
 Lockwood, William R., 513, 570
 Logan, James G., 338
 Long, Lawrence W., 124
 Long, William A., Jr., 279
 Lotterhos, William E., 30, 32, 124, 196, 338, 449, 570,
 Love, M. S., 279
 Lowe, C. Foster, 513
 Lummus, Floyd L., 279
 Magee, Harold G., 449
 Mann, J. E., 612
 Manning, J. O., 513
 Marascalco, Charles, 655
 Martin, Ben F., 516
 Martin, Thomas Stanley, 32
 Martinolich, A. K., 30
 Masterson, Chester W., 397
 McDonald, Thomas J., 338
 McDonnieal, S. H., Jr., 397
 McDougal, L. L., 197
 McFadden, John, 124
 McFarland, Wesley L., 338
 McKell, William M., Jr., 397
 McKinley, Robert L., Jr., 124, 338, 612
 McLain, James L., 279
 McRae, John M., 196
 McVey, Eric A., 30
 Meena, Albert L., 32
 Miller, J. Hampton, 654
 Mink, Paul E., 570
 Mitchell, C. B., 197
 Mitchell, Shelby W., 32, 338,
 Mitchell, Tom H., 278
 Moore, Floy J., 654
 Moore, Paul H., 397
 Moore, Steven L., 32, 612
 Morgan, Frank J., Jr., 513
 Moynihan, Patricia, 124
 Mullens, J. R., Jr., 124
 Munn, William G., 32, 279
 Murfee, John A., Jr., 449
 Murry, Charles M., Jr., 570
 Mutziger, Dudley H., 32
 Naef, Richard W., 123
 Nealy, Wren R., 516
 Netterville, Rush, 124
 Nix, J. Elmer, 516
 Norman, Joe Robert, 516
 Oates, J. K., Jr., 124
 O'Neal, K. Ramsay, 278
 Owens, Louis J., 448
 Owens, W. F., Jr., 123
 Packer, James M., 278

Pandey, Shanti, 449
 Parker, William H., 278, 654
 Pate, S. Ray, 654
 Patrick, Bernard S., 654
 Pearson, Glenn T., 32
 Peeler, Joe G., Jr., 279
 Pennington, V. M., 612
 Person, Milton T., 655
 Pharr, Max L., 338
 Philpot, Van B., Jr., 338
 Pickle, A. C., 197
 Pittman, James A., 570
 Polk, Octavius D., 123
 Prescott, J. T., 124
 Profflet, William B., Jr., 516
 Purvis, Thomas L., Jr., 196
 Puryear, Lamar, Jr., 196
 Rader, Ben B., Jr., 449
 Raines, D. C., III, 278
 Raulston, William R., 278
 Rayner, D. R., 612
 Read, Allen M., 570
 Redd, Janice, 30
 Reeves, Ernest P., 197
 Rester, Robert, 32, 654
 Riemann, E. T., Jr., 30
 Robbins, E. P., 449
 Roberts, Curtis D., 32, 124,
 Robinson, R. B., 196
 Rodriguez, Gaston, 30
 Rose, Walter, 612
 Rosenblatt, William H., 397, 516,
 570
 Ross, Joe M., Jr., 30
 Ross, T. E., III, 197, 612
 Ross, Thomas G., 570
 Royals, James L., 30
 Rubenstein, L. A., 612
 Russell, S. C., 76, 612
 Rutherford, J. D., III, 570, 654
 Rutledge, Lewis J., 124
 Samson, Roland, 32
 Santana, Henry D., 516
 Schmidt, E. J., 197
 Schmidt, Frank, 655
 Schmidt, Harry J., Sr., 76
 Schmidt, Richard C., 76
 Scott, E. G., Jr., 612
 Sharbrough, Richmond, 32
 Shaw, Boyd, 124
 Sherline, D. M., 612, 654
 Simmons, Thomas H., 570
 Small, Virginia, 654
 Smith, Perrin N., 513
 Sneed, Ralph, 338
 Steckler, David R., 570
 Stephens, James, 654
 Stewart, Edsel F., 516
 Stockton, Wendell H., 516
 Stodard, Preston R., 338
 Stowers, K. B., 397
 Stowers, W. K., 397
 Surratt, Robert T., 124
 Sutherland, Claude G., 196
 Sweat, William A., 570
 Tannehill, Antone W., Jr., 279
 Taquino, Maurice A., 32, 397, 612
 Tatum, Frank K., 76, 124,
 Tatum, Fred, 123
 Taylor, C. D., Jr., 197, 654
 Taylor, Walter T., 30, 338, 654
 Thaggard, Lamar, 397
 Thompson, J. T., 570, 612
 Thompson, Robert H., 516

Thornton, Dan R., Jr., 654
 Tibbs, Robert C., II, 397
 Tillman, Clifford, 338, 516
 Tipton, Ancel C., 655
 Todd, Norman W., 32
 Tolbert, Virginia S., 338, 449
 Totten, James C., Jr., 449
 Treadwell, Walter, 124
 Tyler, Charles C., 397
 Tyler, Henry B., 612, 655
 Tyrone, Nelson O., 397
 Van Landingham, David J., 655
 Vise, Guy T., 32
 Vise, Guy T., Jr., 570
 Waites, James C., 279, 449, 655
 Watkins, J. W., 397
 Watson, David G., 30, 32
 Webb, Eugene F., 655
 Webb, L. D., 516, 655
 Wells, Fred, Jr., 571
 Wesson, Ray L., 570, 655
 White, Elbert A., III, 76, 124
 White, W. B., 338
 Wiener, Julian, 397
 Williams, Charles, 654
 Williams, Clark, 655
 Williamson, Stoney, 571
 Wilson, David B., 30, 32, 338, 516
 Wilson, David T., 571
 Winstead, W. B., 516
 Wiygul, Frank M., Jr., 197
 Wofford, John D., 124, 655
 Womack, Noel C., Jr., 196, 449
 Wood, William L., Jr., 76, 124
 Woodbridge, Hardy B., Jr., 338, 449
 Wyatt, Rhea L., 124
 Yates, Andrew J., 397
 Yerger, L. B., Jr., 123
 Young, John R., Jr., 279, 338
Pfizer Laboratories
 comments of FDA recall, 78-N
Physical Education
 new image, sports science [Ken-
 dy] 446-E
Physicians
 Arts Festival involves wives, 134-N
 can now incorporate in Mississippi
 [Kennedy] 191-E
 family practice specialist [Ken-
 dy] 273-E
 four indicted for Medicare fraud,
 143-N
 have everything but time [Kennedy]
 651-E
Pituitary
 tumors, roentgen changes in the sel-
 la turcica [Conley] *600
Poisoning
 significance of analytical toxicology
 in the treatment of [Hume and
 Bower] *636
 use of in cases of poisoning [Bower
 and Hume] *639
Pollution
 environment at stake [Kennedy]
 27-E
Potassium
 therapy and gastrointestinal lesions
 [Emerson] *321
Project Care-Som
 new dimensions in emergency med-
 ical rescue services [Shell et al]
 *257

R

Rabies
 State Board of Health warns about,
 78-N
Radiologic Seminars
 Tracheoesophageal Fistula [Col-
 bert] *18
 Subclavian Steal Syndrome [Mc-
 Cay] *66
 Inferior Vena Cavography [Ball]
 *114
 Intravenous Cholangiography [Bar-
 low] *160
 Multiple Myeloma [Blount] *268
 Reversible Vascular Occlusion of the
 Colon [Bouchillon] *331
 Ureteropelvic Junction Obstruction
 [Burrow] *372
 Duplications of the Renal Pelvis and
 Ureter [McCay] *424
 Endometriosis: An Unusual Cause
 of Colon Obstruction [Colbert]
 *502
 Roentgen Diagnosis of Anencephaly
 in Utero [Levi] *554
 Roentgen Changes in the Sella Tur-
 cica in Pituitary Tumors [Con-
 ley] *600
 Paget's Disease [McCay] *644
Ratliff, Jack L.
 joins UMC faculty, 662-N
Redbook Magazine
 publishes new mother's guide, 86-N
Reid, H. Alistair speaks at UMC,
 658-N
Renal Failure
 artificial kidneys in the management
 of [Bower] *317
Research
 specialized centers established by
 NHLI, 626-N
Respiratory Disease
 modern concepts in treatment of in-
 sufficiency [Shaw] *13
Resuscitation
 of the newborn [Smith and Brann]
 *417
Rh Sensitization
 prevention of: anti-Rh immune glob-
 ulin [Wilson] *53
Richman Essay
 1971 contest announced by ACCP,
 617-N
Rubella: See measles.

S

Safety
 restraining devices help mother
 make sure [Kennedy] 119-E
Sanders, John R.
 gets Yugoslavian fellowship, 82-N
Sleep
 studied by UAB scientist, 614-N
**Smith, Kline and French Labora-
 tories**
 remotivation project receives APA
 award, 622-N
Smoking
 new angle: invasion of privacy
 [Kennedy] 117-E

Social Security Administration
self-employed M.D.'s insured for disability, 39-N
to sue five care facilities, 139-N
St. Dominic-Jackson Memorial Hospital
elects medical staff, 136-N
Stenosis
idiopathic hypertrophic subaortic [Hatten] *106
Sterility
evaluation studies by microbiologist, 518-N
Student American Medical Association
reactivated at UMC, 402-N
Sumner, A. F.
Mississippi Attorney General speaks to UMC Student Assembly, 621-N
Surgery
coronary artery course set, 456-N
emergencies of the newborn [Miller] *585
for early invasive carcinoma other cervix [Hickman and Gibson] *253
of the thymus [Bernatz] *629
Syringomyelia
in Mississippi [Tipton and Haerer] *533

T

Tamp-R-Tel
new packaging concept introduced by Wyeth, 295-N
Tate, Charles F., Jr.
addresses TB-RD association, 304-N
Taxes
bill proposed to end inheritance tax, 94-N
pre-addressed labels speed returns, 128-N
the agony and ecstasy of [Kennedy] 72-E
Technicon Corporation
announces AutoAnalyzer II, 131-N
Teenage Nation
profile of our children [Kennedy] 565-E
TELEMED
develops multiprocessing computer, 404-N
Thiede, Henry A.
named UMC assistant dean, 612-N
Thymus
surgery of [Bernatz] *629
Toxicology
significance of in treatment of poisoning [Hume and Bower] *636
Tri-State Thoracic Society
meets at Biloxi, 50-N
Tuberculosis
27 months of chemoprophylaxis for prevention of, in Mississippi [Reid] *485
Tumors
pituitary, roentgen changes in the sella turcica [Conley] *600

U

University of Alabama Medical Center
announces 3-year M.D. program, 620-N
names new psychiatry chief, 132-N
opens intensive care unit, 81-N
scientist studies sleep, 614-N
to study heart attack, 97-N
uses NIRU computer, 49-N
University of California
announces master of public health program, 626-N
hosts postgraduate education program, 41-N
sponsors postgraduate courses, 85-N
offers hypertension course, 82-N
presents OB-GYN seminar, 361-N
University of Illinois
plans postgraduate laryngology and bronchoesophagology course, 612-N
University of Mississippi School of Medicine
adds newborn nursery and intensive care unit, 530-N
adds five to faculty, 528-N
alumni house dedicated, 401-N
and State Board of Health set up neurological clinics, 42-N
announces faculty changes, 616-N
announces new appointments, 50-N
Attorney Gen. Sumner speaks at Student Assembly, 621-N
Blount, R. E., named acting director and dean, 620-N
Carter, R. E., resigns as dean and director, 527-N
commencement activities announced, 304-N
construction begins on blind rehabilitation center, 529-N
coronary care unit nears completion, 574-N
Eisler, R. M. and Ratliff, J. L., join faculty, 662-N
establishes home dialysis unit, 454-N
graduates 75 M.D.'s, 407-N
Grimes, D. A., named hospital administrator, 406-N
honors Dr. and Mrs. R. E. Carter at reception, 617-N
instituted baccalaureate degree program for medical record librarians, 526-N
Leathers' portrait given to school, 622-N
medical alumni president-elect is Dr. J. Dan Mitchell, 455-N
medical technologists get postgraduate training, 660-N
MSMA membership opened to upperclassmen, 657-N
offers nurses master degree program, 624-N
Reid, H. Alistair speaks, 658-N
SAMA chapter reactivated, 402-N
Snively Medical Library dedicated, 526-N

Thiede, Henry A., named assistant dean, 612-N
ups faculty to 182, 450-N
ups freshman class to 95, 528-N
250 students attend Pre-Med Day, 662-N
University of Mississippi School of Pharmacy
develops insect sting drug, 140-N
grows marihuana, 84-N
organizes pharmacy museum, 198-N
publishes marihuana index, 621-N
ups standing, 137-N
University of Southern Mississippi
student health services offer comprehensive program, 37-N
Upjohn Company, The
court gives right to argue

V

Vascular Disease
peripheral, amputations in patients with [Warren] *581
Vietnam Returnees
acute illness among [Blount] *8

W

Webb, Henry H.
installed as Fellow of American College of Obstetricians and Gynecologists, 143-N
West Mississippi Medical Society
elects officers, 146-N
Williams, M. Ney
heads Gettysburg Commission, 360-N
Whitaker, Harold H.
selected for USPHS study, 457-N
Wiygul, Frank M., Jr.
named MSMA section officer, 143-N
Woman's Auxiliary to MSMA
plans 1970-71 AMA-ERF campaign, 456-N
Wood, Chad and Judy
Mississippian's children graduate from UT, 86-N
Wong, Vernon G.
appointed NEI clinical director, 624-N
Wyeth Laboratories
designs Ovral 3-month package, 574-N
development reported at AHA meeting, 96-N
films win awards at 12th annual American Film Festival, 623-N
introduces new packaging concept, 295-N
president is foundation chairman, 409-N

Y

Yale Medical School
gets \$2 million grant, 90-N
Yellow Pages
consumer study shows active market use for pharmacies, 524-N
Youth
and drugs [Guernsey] *595

AUTHOR INDEX

The letters used to explain in which department the matter indexed appears are as follows: "E," Editorial; "N," News; "L," Letters to the Editor; "PP," President's

Page; "RS," Radiologic Seminar. The asterisk (*) indicates an original article in the JOURNAL.

A

Alvis, J. L., 281-BR

B

Ball, O. G., *114-RS
Barlow, J. B., *160-RS
Bernatz, P. E., *629
Blount, J. G., *268-RS
Blount, R. L., 281-BR
Blount, R. E., *8, 403-BR
Bouchillon, C. D., *331-RS
Bower, J. D., 199-BR, *317, *636, *639
Bowlin, J. W., *309
Brann, A. W., Jr., *327, *417, *493
Brent, A. E., 262-CPC
Brumby, P. B., 334-PP, 386-PP, 442-PP, 506-PP, 556-PP, 602-PP, 646-PP
Buckley, T. L. R., 573-BR
Burman, R. G., 77-BR
Burrow, N. W., *372-RS
Buttram, V. C. B., *1

C

Campbell, G. D., 341-BR
Clark, J. E., *257
Colbert, W. T., *188, *502-RS
Conley, L. M., *600-RS

D

Davis, David, *101
Dill, A. R., 613-RB

E

Emerson, D. N., *321

F

Field, R. J., Jr., 659-BR

G

Gibson, N. P., 659-BR
Gibson, J. Y., *253
Goldberg, M. F., *149
Guernsey, C. E., *595

H

Haerer, A. F., *533
Hardy, J. D., *101
Hatten, K. W., *106, 613-BR
Hickman, B. T., *253
Hume, A. S., *636, *639

J

Jackson, J. F., 35-BR, *365

K

Keller, W. K., *110
Kennedy, R. B., 23-E, 25-E, 26-E, 27-E, 69-E, 71-E, 72-E, 73-E, 118-E, 119-E, 120-E, 191-E, 193-E, 273-E, 275-E, 276-E, 277-E, 335-E, 336-E, 337-E, 387-E, 389-E, 390-E, 392-E, 394-E, 443-E, 445-E, 446-E, 447-E, 507-E, 509-E, 510-E, 511-E, 512-E, 517-BR, 557-E, 559-E, 561-E, 565-E, 603-E, 605-E, 606-E, 607-E, 647-E, 650-E, 651-E, 652-E

L

Lehan, P. H., *101
Levi, S., *554-RS

M

McCay, T. S., *66-RS, *424-RS, *644-RS
McKell, W. M., Jr., *477
McKinley, R. L., Jr., 403-BR

Milam, J. T., *61
Miller, R. C., *585
Mora, Lidio O., 77-BR, *477

N

Nassar, G. J., *541
Nettles, D. C., *57
Nicholas, P. Y., *257

P

Pullen, J., *543

R

Reid, L. R., *485
Ricks, H. C., 76-L
Rogers, J. B., 341-BR
Rosenblatt, W. H., *57
Royals, J. L., 22-PP, 68-PP, 116-PP, 190-PP, 272-PP, *374
Rush, H. L., 35-BR

S

Schiesari, L., 262-CPC
Shaw, G. B., *13
Shell, B. J., *257
Sherline, D. M., *413
Smith, R. E., *417
Smith, R., *543

T

Thompson, W. B., 199-BR
Timmis, H. H., *101
Tipton, A. C., Jr., *533
Tyler, H. B., 517-BR

W

Warren, R., *581
Wilson, G. M., 573-BR
Wilson, W. B., *53
Wright, D. I., *493

TABLE OF PAGES

January	1 to 52	July	365 to 412	December	629 to 674
February	53 to 100	August	413 to 476	By-Laws of the	
March	101 to 148	September	477 to 532	Association	378 to 385
April	149 to 252	October	533 to 580	Transactions of the	
May	253 to 308	November	581 to 628	House of Delegates	427 to 473
June	309 to 364				

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Index to Advertisers

American Cancer Society	108	Medicenters of America, Inc.	second cover
Arch Laboratories	673	MPAC, AMPAC	672
Blue Cross Blue Shield	8	New Orleans Graduate Medical Assembly	12
Campbell Soup Company	644A	Pharmaceutical Manufacturers Association	660A
Hill Crest Hospital	6	William P. Poythress and Co., Inc.	652A, 652B
History of Medicine Limited	14	A. H. Robins Company	10, 10A, 14A, 14B, 15
Hynson, Westcott and Dunning, Inc.	3	Roche Laboratories	660B, 660C, 660D, fourth cover
Kay Surgical, Inc.	673	Schering Corporation	16, 17
Lederle Laboratories	4, 7	G. D. Searle Company	644B, 644C
Leonard Wright Sanatorium	11	Smith Kline and French Laboratories	644D
Eli Lilly and Company	front cover, 18	Stuart Pharmaceuticals	634, 635
		Thomas Yates and Company	third cover

IN CONCLUSION

The Chamber of Commerce of the United States, the most influential and powerful, broad-representation business organization in nation, has denounced the Kennedy-Reuther-Woodcock national health insurance bill. Chamber points out that annual costs of fantastic and unrealistic program, estimated at \$77 billion a year, would be \$1,000 per American family. A blue ribbon task force of 15 top business and industry leaders is studying health delivery system for Chamber.

A special exhibit on man's use of drugs will be presented by the Smithsonian Institution in 1971. Pharmaceutical Manufacturers Association is coordinating drug makers' contributions which will show progress in pharmacology, benefits of proper use under medical management, and abuses now prevalent. Exhibit will open next March and continue until September. Smithsonian and PMA officials say that 2 million Americans will view the major presentation.

A study of fees for five inpatient procedures for Medicare beneficiaries shows that charges to this age-sensitive group have not risen as rapidly as physicians' fees for all services. Procedures studied are cholecystectomy, reduction of fracture of neck of the femur, and prostatectomy and medical care of CVA and myocardial infarction. National Association of Blue Shield Plans says study supports fact that physicians have not abused Medicare.

New trend to regulate hospital charges is looming on medical horizon. New York legislature recently gave Commissioner of Health the authority to fix hospital charge rates. California will consider legislation next year to create state regulatory agency which would exercise control over hospital charges. One aspect of new program would be requirement of uniform hospital accounting procedures and public reports on hospital finances.

Dental care insurance is growing and gaining favor, but built-in problems remain to be solved. Last year, 2.9 million Americans had some form of dental care insurance which paid out \$78 million in benefits. Most plans have healthy deductible of \$20 to \$50 per course of care and co-pay requirement up to 25 per cent. Biggest problem is nonacute aspects of dental conditions and postponability of care, invariably making conditions worse and care costs higher.

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